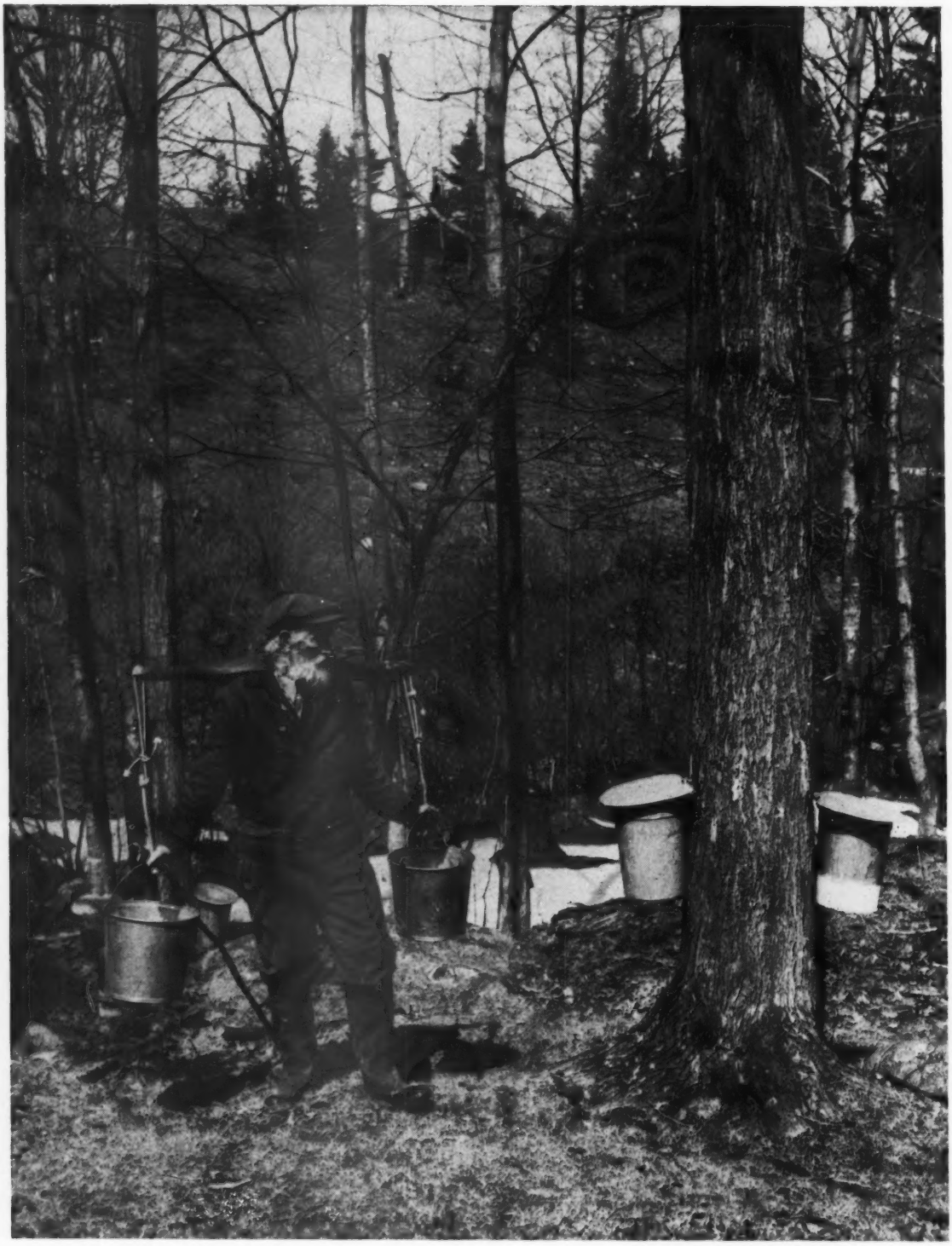
New York State Conservationist

Courtesy of Harry T. Peters and Life Magazine

"Trout Fishing on Chateaugay Lake"

State of New York Conservation Department

February-March, 1948



Genuine New York Maple Syrup

This Magazine (What, Again?)

Comes up now a letter from George in Tupper Lake, striking a foul blow.

"Dear Editor," he says, "It's a long time between drinks. Regards. George."

What George is hinting at, we nervously suspect, is the curious schedule according to which this magazine makes it appearance. As you murmur that you didn't know we had a schedule, let us point out that although we call this a bi-monthly it might have been better to put it differently. It might have been better to say that anyone who shelled out one skin stood a sporting chance of getting six issues during the course of a year. But it was felt that such a statement would look poorly on the masthead, and besides it pinned us down too much. We're probably on safer ground to call this a bi-monthly because not many people are quite sure what that means, and the way this magazine comes out isn't going to enlighten them any.

George obviously doesn't understand the wonderful way in which this magazine is gotten together. We don't either, but it might clear things up if George were to tag along as we go in quest of material for the next issue:

Our field men are easier to tap than the boys in the Albany office because it's often possible to trap them by phone before they get any warning of what's about to happen to them. Not so here in Albany. As we start the rounds there are cries of "Cheeze it, here he comes"; then a frantic scurrying as Commissioners and lesser fry dive under desks like rabbits popping into a warren; then stunning silence. Eventually these characters are rounded up, and eventually the magazine comes out, but it all takes time. Nobody in his right mind would attempt to predict how much.

Contributions by the editorial staff itself are the only ones that can be counted on. They are invariably two weeks late.—Editor

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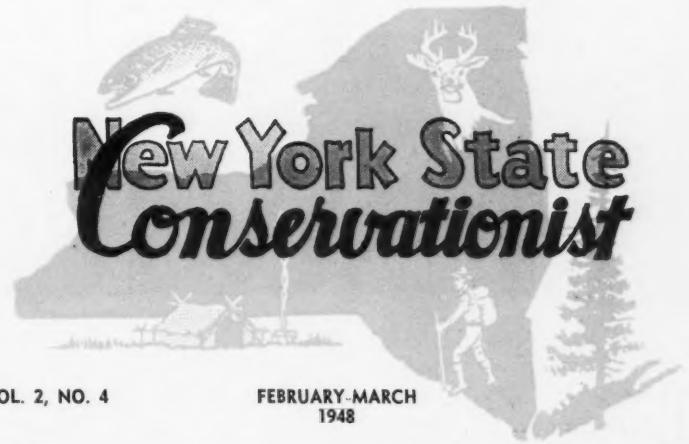

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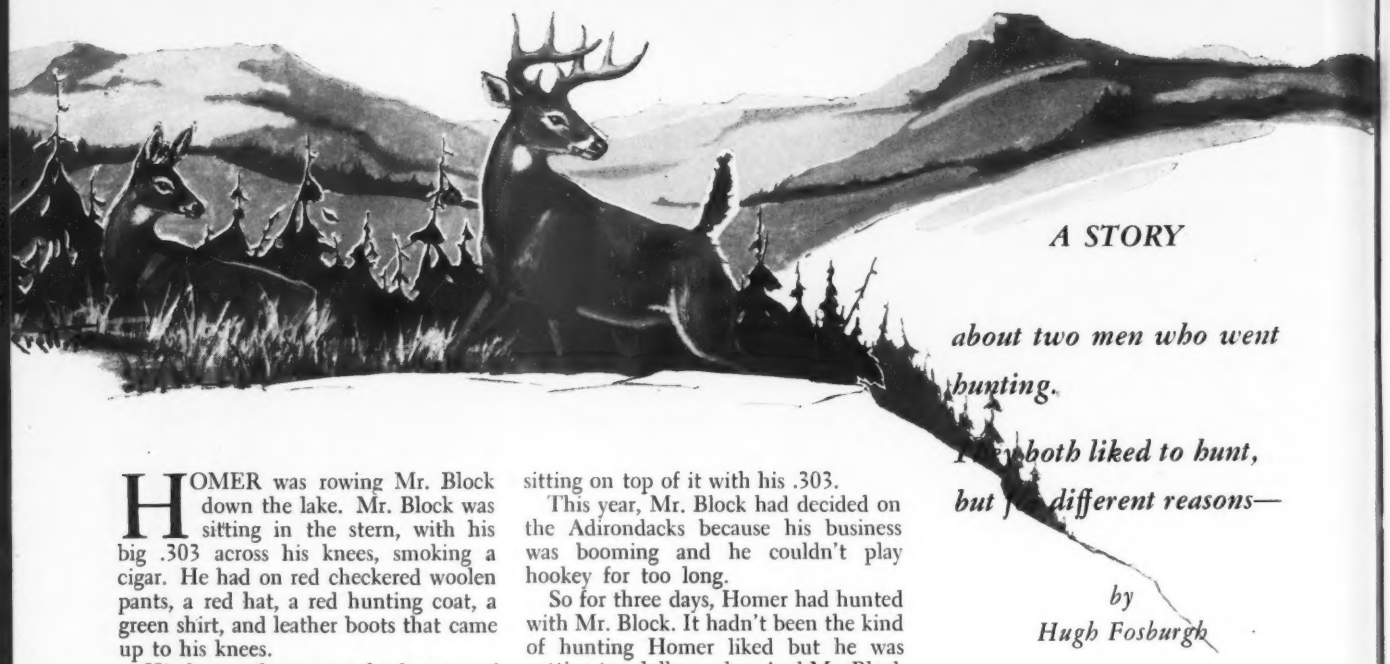


A STORY

about two men who went hunting.

They both liked to hunt, but for different reasons—

by
Hugh Fosburgh

HOMER was rowing Mr. Block down the lake. Mr. Block was sitting in the stern, with his big .303 across his knees, smoking a cigar. He had on red checkered woolen pants, a red hat, a red hunting coat, a green shirt, and leather boots that came up to his knees.

His knapsack was on the bottom of the boat in front of him. Homer didn't know exactly what all was in it, but he knew it was heavy because in the last three days he had had to carry it most of the time—along with his own pack that had the lunch in it. He knew there was a Bowie knife, hatchet, and field glasses; a compass, and a rubber pad to sit on; a slicker in case it rained, a pair of wool socks, some oil paper to wrap liver in, and a pint of rye whiskey. Mr. Block had told him that he knew, from experience, that these things came in handy every now and then.

As Homer rowed, he kept his eyes on the stock of the .303. Although the carving was upside down, he knew what it all meant because Mr. Block had shown it to him the night he arrived. There were the words "moose", and "bear", and "elk", and "caribou", and "deer", and after each word there were a certain number of notches. There were 18 notches after "moose", which was the most. One of the "bear" notches had a circle around it.

Mr. Block had explained all this. He was a passionate big game hunter. Each year he took a trip somewhere. Usually he went to Ontario because he was especially fond of moose hunting in September, and he had a guide there who could call them into the water like nobody's business. But sometimes, he branched out and went places like Alaska or British Columbia. In Alaska, a few years back, he had killed a record grizzly bear (the notch with the circle), and that had been the greatest thrill of his life. He had given Homer a photograph showing the bear, its mouth propped open by a stick, and Mr. Block sitting on top of it with his .303.

This year, Mr. Block had decided on the Adirondacks because his business was booming and he couldn't play hookey for too long.

So for three days, Homer had hunted with Mr. Block. It hadn't been the kind of hunting Homer liked but he was getting ten dollars a day. And Mr. Block had hinted, with a sly laugh, that Homer wouldn't regret it if Mr. Block went home with a good buck roped on his front fender.

Homer didn't hold out much hope for this because the woods were dry and it was tough getting Mr. Block around without making a racket.

They had tried still hunting the first day, but it wasn't any use. Mr. Block had tried hard for a couple of hours, but then he'd gotten tired and careless, and decided to go home at two o'clock.

The second day hadn't been much better. Homer had taken him to Beaver Mountain to try some short drives, but Homer had been scared to ask him to walk too far so Mr. Block didn't get to the best up-hill watches. They saw three does but that was all.

The third day was a failure, too. They'd gone out to the beaver dam to watch the ravine for a while, hoping to catch a buck crossing to the ridges, but Homer gave up because Mr. Block kept clearing his throat and spitting. After that, he tried spooking a deer out of the swamp to where Mr. Block was sitting on a knoll. He'd jumped a four-pointer out of its bed in the bear grass and watched it tear off towards the alders. Just before it reached them, it stopped to look back. When Mr. Block heard about this, he said, "If you see another one, shoot it."

That afternoon, Mr. Block went home early again so that he could watch the camp clearing in case a buck came there to feed.

So this was the last day. Mr. Block had said he was leaving the next morning. Homer guessed he was pretty fed up by seeing nothing but three does in all this hunting. So Homer was taking him to The Ridge. He hadn't wanted to do it because he felt sentimental about The Ridge—he always associated it with the wonderful hunts he used to have with his father—and didn't want it defiled by strangers.

BUT what the hell, it was the last day. He couldn't get the old man a buck any other way, and he probably wouldn't get one this way either. The woods were too noisy, and Mr. Block probably wouldn't go exactly where he told him —which was important—and even if he did, he'd probably start clearing his throat and moving around on the watch.

But anyway, he would put Mr. Block on the best watch he knew—the big rock, atop the ridge, that overlooked the ravines on each side—and that would be the last he'd see of Mr. Block for quite a while. Then he'd row down the lake, move over to the end of the ridge, and work up it towards Mr. Block. What he'd do, exactly, depended on the tracks he saw, and the wind. But there was a good chance that any deer he scared up would cut through one or the other of the ravines where Mr. Block would get a crack at it.

Homer explained this strategy to Mr. Block as they rowed down the lake. He told him he should approach the big rock from the rear so as not to scare anything in the ravines. He told him he should keep a constant watch as the ravines were favorite crossings for deer, especially in the rutting season which

The Big Game Hunter

should have begun by now. He said all this in the hope that Mr. Block wouldn't get too impatient sitting there on the rock.

"I see," said Mr. Block. "Well, if you see one, don't pass it up. I want some meat to take home." He winked at Homer. "Even it it hasn't got a good head."

Homer laughed. "You get him. I'll get one later."

He rowed close into shore. Then he turned the boat around and backed it gently onto a log. Mr. Block got up clumsily, with the cigar in his mouth, and almost stumbled getting out.

Homer handed out the knapsack. "You've got lots of time to get up there," he said. "I won't be along for an hour or so. Maybe more." He knew it would be a lot more.

Homer watched Mr. Block take off his hunting coat and tie it around his waist, and he felt guilty, suddenly, about making the man sit for so long on that rock.

"Watch that far ravine especially," said Homer. "There are some ledges on the other side of it where deer go in and out a lot. They use the ravine going to and fro."

"I will," said Mr. Block. He relit his cigar, cleared his throat, spit, and tramped off into the woods.

Homer watched until he was out of sight. That was that. The old man would bumble up to the rock, and probably scare out every deer on the ridge. Still, there was a chance. The sun was melting the frost now, and the leaves wouldn't be too crisp for a while. Perhaps he could put a buck through to the old buzzard after all.

He started to row down the lake with long easy strokes.

Up on The Ridge, the buck was drowsing in the first warmth of the sun when his attention was aroused by something on the lake. Hollow, far-reaching sounds came from there. Once, through the trees, something flashed in the water.

He stood up to watch and listen. He knew it was something strange but it was too far away to scare him. Besides, it was out in the water. Whatever it was went into the cove at the end of the lake and the noises faded away.

The buck didn't lie down again. He wandered about, clipping a few twigs, and then he scratched the base of one horn with a hind foot. Then he went to the top of the ridge and down the far side to the ledges. He slid down the first shelf on his haunches and meandered along the narrow bench, stopping occasionally to look back. Then he bedded down in the shade, close up against a rock, and dozed again.

The doe came to the top of the ridge and lay down in the dry grass.

Homer pulled the boat into the bushes, sat down on a log, and lit a cigarette. This was the way he liked things to be. The business of dragging a man around the woods with you was no good, especially when you knew that all he cared about was getting a buck. You felt uneasy and a little stupid—like telling a story that doesn't come off—after you'd made him hunt all day and didn't have a thing to show for it. Mr. Block hadn't said anything yet but it was plain that he was fed up with the way things were going. Well, nuts, if The Ridge didn't work, nothing would.

Homer slung the lunch pack over his shoulder, levered a shell into the barrel, and started off on the trail that skirted the balsam swamp.

He worked around to the far side of the ridge without seeing anything. There were plenty of tracks and signs that deer had been feeding on the beechnuts, but nothing fresh that indicated a big one had gone up onto the ridge.

He left the trail to follow the contour of the ground that separated the evergreens from the hardwoods, and presently he found the tracks of two deer coming from the swamp.

This was what he had been looking for. Those deer might be lying on the ridge now. But it might be a buck chasing a doe. In that case, they could be miles away by this time.

Looking down into the swamp where they had come from, he saw an alder that had been freshly scraped. He went to investigate, and sure enough, one of the deer had done it. A buck that was chasing a doe wouldn't stop to shine his horns. That meant they were together and probably lying up there taking it easy.

This promised to be pretty good. Things were shaping up nicely. But there wasn't any need to rush. He sat down on a log, lit another cigarette, and plotted his campaign.

The deer were on the ridge, you couldn't be sure where, but probably around the ledges. He could follow the tracks for a while and see what happened, or he could head up and cut over the top towards Mr. Block, hoping to drive them out through the ravine. But he might miss them that way.

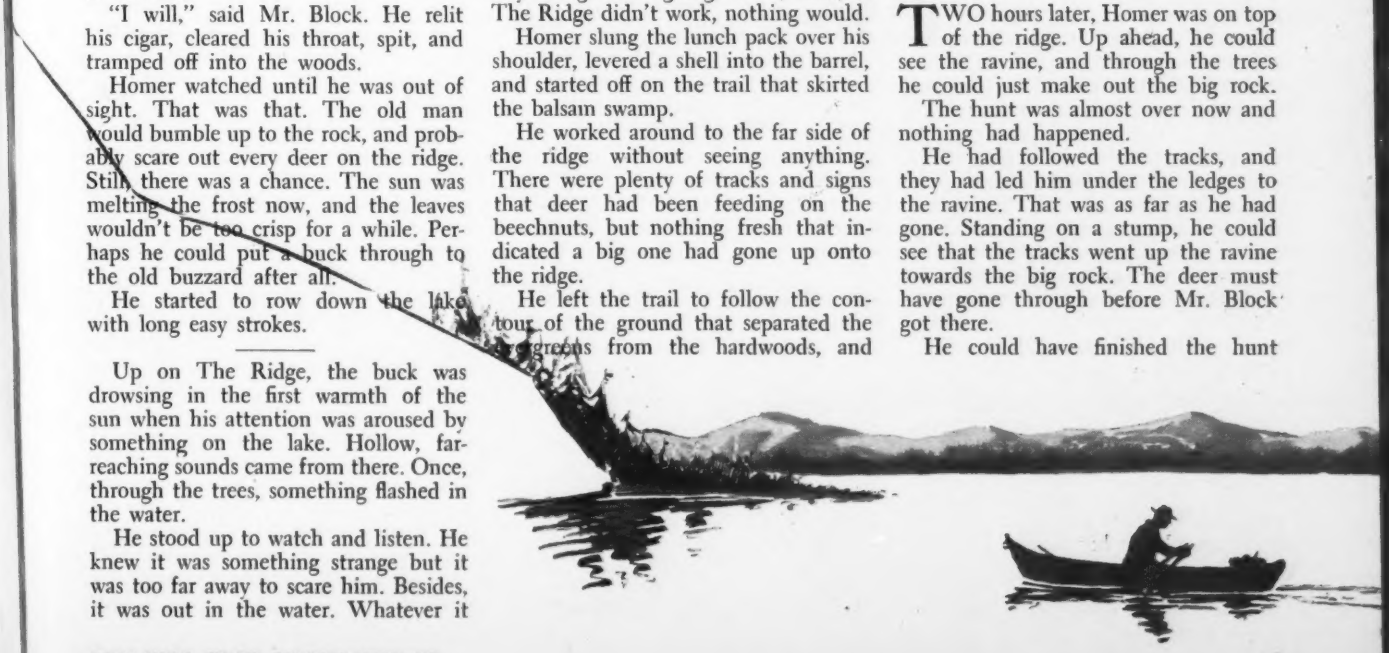
He decided to follow the tracks.

TWO hours later, Homer was on top of the ridge. Up ahead, he could see the ravine, and through the trees he could just make out the big rock.

The hunt was almost over now and nothing had happened.

He had followed the tracks, and they had led him under the ledges to the ravine. That was as far as he had gone. Standing on a stump, he could see that the tracks went up the ravine towards the big rock. The deer must have gone through before Mr. Block got there.

He could have finished the hunt



right then and there by going up to Mr. Block. But he hadn't. He had figured that maybe the deer had cut back along the top to lie down. He had figured that if he retraced his steps to the far end of the ridge, then went to the top, there was still a good chance of routing out the deer and driving them to Mr. Block.

That is what he had tried to do and nothing had happened. He had seen no sign of the deer. The hunt was almost over.

What made things much worse was Mr. Block. He had told Mr. Block that this hunt would take about an hour. It had taken almost three. He could imagine Mr. Block up there on the rock, getting more impatient by the minute. He was probably clearing his throat and stamping around right now.

It was too bad. He didn't want to go over there and explain what he'd been doing and that it was just tough luck Mr. Block hadn't gotten a shot at a good buck. And he didn't want to plan another hunt and drag Mr. Block to some other watch. Mr. Block would have lost interest. It wouldn't be any use any way. It just wouldn't.

Slightly below him, a huge stone jutted over the ledges. Homer had sat on that rock many times. It afforded a fine view of the terrain below, and you could see out over the country for miles. It would be pleasant to sit there for a while and smoke a cigarette while he decided what to do about Mr. Block.

He picked his way through the leaves, crept out on the stone, and sat down.

It was warm and lazy in the sun, and quiet. Homer sat there, studying the ledges below until he was sure that the buck wasn't there. Then his mind wandered, and he was imagining that everything was different—that it wasn't Mr. Block waiting for him up there on the rock, it was his father. His father was there—watchful, patient, content, and when Homer would go over to tell him that the buck had gone through before the hunt started, his father would smile and nod his head, understanding everything. Then they would plot another stratagem to get that buck, and start after him again.

HE got a cigarette and put it in his mouth. He was feeling in his shirt pocket for a match, when he saw the buck stand up in front of the ledge just this side of the ravine. He could see its back and neck and head, and the horns that were almost white around the tips. It was looking up the ridge towards the big rock.

Homer got the cigarette in his teeth, pried it loose from his lips, and let it roll down his shirt front. He had his finger on the trigger so the hammer wouldn't click when he cocked the rifle. Then he was bringing the rifle up slowly until he was looking at the buck through the sights. His elbows rested on his knees while he watched the buck.

He could kill that deer just by squeezing his finger. Mr. Block had said to go ahead and do it. He had passed up one spike horn. Here was a nice deer. Eight points at least. Maybe ten.

But perhaps Mr. Block could get a shot at it. Perhaps if he fired into the rock, just behind the deer, he could drive it into the ravine below Mr. Block. Maybe the buck sensed danger in that direction, but more likely it was just watching the doe up there.

Homer let his eyes wander up the hillside. He couldn't see the doe.

He looked back at the buck, and then Mr. Block fired his .303. The explosion crashed and reverberated through the ledges, went over to Beaver Mountain, and echoed back. The buck wheeled and raced up the ridge towards Homer. Twenty feet away, it saw him, snorted and turned, then tore along the ledges into the ravine below Mr. Block. Homer watched it disappear, then come into sight again on the far side making thirty feet at a jump. It

went out of sight and everything was silent—as though nothing had happened.

Homer uncocked the rifle and stood up. He was breathing hard. What the hell was going on here? What did Block shoot at and why didn't he kill that buck when it crossed the ravine?

He went over to find out.

He found Mr. Block stumbling down off the rock, a cigar in his teeth, with his pack and rifle slung over one shoulder.

"Why didn't you shoot . . .?" began Homer, and then he saw that funny look on Mr. Block's face.

"Where is it?" asked Homer.

"It's over there," said Mr. Block. "It came around that point of rocks."

Homer started walking in the direction that Mr. Block pointed.

"It looked pretty big," explained Mr. Block. He was puffing to keep up. "I figured I'd take a chance seeing it was probably the last one."

HOMER walked up to the doe and looked at it. He put down the rifle and the lunch pack, rolled up his sleeves, and took out his knife.

"It may go sixty pounds," he said.

Mr. Block sat down on his rubber pad. "It is pretty small, isn't it?" he said.

Homer turned the deer over to see where it had been hit. The bullet had entered the guts, gone up through the chest, and come out the shoulder. A fine messy job. A wonderful fine bloody butchering job.

He started to cut the head off. When he had cut everything except the bone, he twisted the head until it came off. He threw it down between two rocks, then kicked dirt and leaves over it.

"Hiding the evidence, eh?"

Homer put the deer on its back and knelt beside it.

Mr. Block tried again. "Do you think I can get away with trying to take some of it home?"

Homer was splitting the stomach. "Mr. Block," he said, "you're damn well going to try."

Mr. Block fumbled in his knapsack for the bottle of rye. He took three swallows, then held out the bottle.

Homer was working to free the stomach. "No," he said.

He worked until he had the liver. "Where's that paper?" he asked, without looking up. "Half of this stuff isn't shot to hell."

"Never mind about that, Homer," said Mr. Block. "We can forget about the liver."

"We're taking the liver. We're taking every God damn thing."

Mr. Block handed him the paper. "O.K., Homer," he said. "Whatever you say."

Homer held the deer by the tail and the neck to let the blood drain.

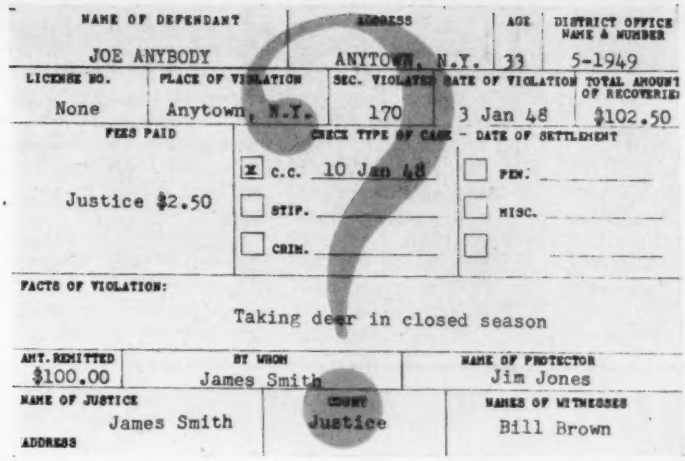
"Do you want some help?" asked Mr. Block.

"No." Homer slit the skin between the tendons on a front leg and stuck the other front leg through it. Then he took off his belt to use for a drag line. Then he cleaned his hands and arms in the leaves, and took up his rifle and pack. He looked at Mr. Block for the first time.

"Mr. Block," he said. "I'll drag your meat down. Why don't you sit right here and carve a notch in that rifle of yours?"

Homer picked up the drag line and started down the ravine. THE END

Who Is the Violator



NAME OF DEFENDANT	ADDRESS	AGE	DISTRICT OFFICE NAME & NUMBER
JOE ANYBODY	ANYTOWN, N.Y.	33	5-1949

LICENSE NO.	PLACE OF VIOLATION	SEC. VIOLATED	DATE OF VIOLATION	TOTAL AMOUNT OF RECOVERIES
None	Anytown, N.Y.	170	3 Jan 48	$102.50

FEES PAID	CHECK TYPE OF CASE - DATE OF SETTLEMENT	
Justice $2.50	[x] C.C. 10 Jan 48	[ ] PEN.
	[ ] STIP.	[ ] MISC.
	[ ] CRIM.	[ ]

FACTS OF VIOLATION:

Taking deer in closed season

AMT. REMITTED	BY WHOM	NAME OF PROTECTOR
$100.00	James Smith	Jim Jones

NAME OF JUSTICE	COURT	NAMES OF WITNESSES
James Smith	Justice	Bill Brown

ADDRESS

SHORTLY after the close of the 1947 hunting season I had a speaking engagement at a meeting of a sportsmen's group in the Catskill area. This Department's list of December game law violators had just been released (894 strong), and the discussion eventually got into that channel.

When the meeting was over a member of the host club came up with some ideas of his own.

"We have sort of a special problem down here," he said, "so far as enforcement is concerned. We're pretty close to the metropolitan area and that New York bunch is really something when it comes to breaking game laws."

Pretty outspoken; also pretty consistent with the trend of thought of most upstate sportsmen who contend that the "city slicker" is the guy to put the finger on. It raised a question in my mind, however, and I took my curiosity to an adding machine.

As basis for an analysis, the State was broken down geographically into those general sections outlined in the 1947 deer regulations: the Catskill area, with 11 per cent of the population; the Adirondacks, with 8; Southern Tier and western, with 22. The metropolitan and Long Island counties were added as a fourth segment, with roughly 59 per cent of the State's people.

All comparisons were taken on the 1,389 violations cases settled by the Department in October and November—highest two months of the year. And, they were based on residence of violator rather than place of violation.

If you hold with the old maxim that figures don't lie, the result of this mathematical probe is pretty interesting. First off, it showed the New York "city slicker" fourth on the list of violators, with only 15 per cent of the total. Upstaters can laugh that off with the observation that New Yorkers are generally too busy fighting snow and high prices to fool around with hunting and fishing, but the figures are there, just the same.

Now, let's see what happened in the rest of the State:

The Southern Tier and western section, with 22 per cent of the State's population, was the worst of the lot, committing 47 per cent of the violations. And the Adirondack and Catskill counties ran a dead heat, proportionately, for second place—the former with 8 per cent of our population and 16 per cent of the violations and the latter with comparable figures of 11 and 22 per cent.

What pot is calling what kettle black?

The argument may be raised, of course, that there are plenty of big upstate cities with strictly urban-minded populations. Foreseeing that, we broke the list down still farther; we took 20 counties containing communities with populations of 15,000 or better, and matched violators in those communities with those in the counties as a whole. This mathematical venture showed that the rural populations in these counties committed 52 per cent of the infractions, the city boys 48. In 11 of the 20 counties, violations by rural residents exceeded those of the city-bred hunter. The two worst offenders, incidentally, were Monroe, with 80 cases, and Onondaga with 79.

IT may be argued that—living next to the land—the rural resident has more opportunities to hunt and fish than the city sportsman, and that this circumstance automatically creates more opportunities for law breaking. Even were that point not conjecturable (which it certainly is), it still wouldn't gainsay the fact of the violations themselves.

Our little joust with the adding machine turned up a lot of other figures on violations that are equally as interesting. For one thing, it disproved the old wives' tale and current apprehension that boys in their 'teens, and up to legal age of maturity, are responsible for the bulk of New York's Conservation Law violations. Spot checks of 100 cases in each of the four geographic sections concerned revealed that the juvenile committed only 17 per cent.

We trust that indicates the growing success of the State's conservation education program and that of youth programs conducted by a few of the harder working sportsmen's groups themselves. It certainly disproves the much booted-about supposition that the Department's Game Protectors spend most of their time picking on kids.

The bulk of the infractions—43 per cent—were committed by the 21 to 35 age group, but of this number only 12 per cent were 22 to 24 years of age.

Well grown-up men who should know better (36 to 45) were involved in 21 per cent of the violations, and those 46 and over in 19 per cent. The average violator's age was 33 years plus.

And the women?

Well, there weren't many during the year as a whole (32 in fact, out of 4,000-odd cases), but there were more than there had been in recent years, and their violations were far from picayune. They included hunting game birds during closed season; taking trout during closed season (one offender was fined $100 for such a deal); carrying loaded firearms in cars; possession of illegal venison, and falsifying license applications.

So just who IS the violator?

Well, he may be the millionaire playboy who erroneously thinks himself exempt from laws governing legal limits of game, or he may be Joe Doakes from Horner's Corners who figures he can knock off a doe deer any time of the year—and so what?

And—if you want it that way—he may also be one of your close friends.

—Bob Bush

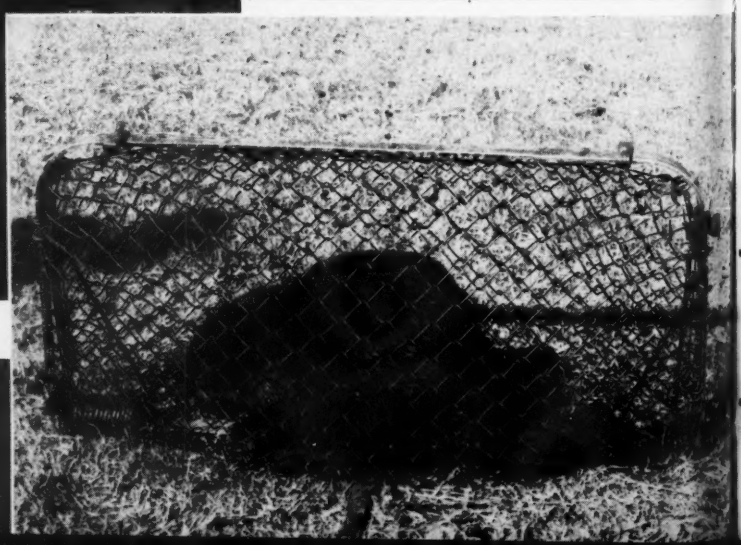
EVERY species of wildlife can become a nuisance. So one of the problems of wildlife management is to keep game where it belongs—as well as in proper abundance with relation to the environment and demand of sportsmen.

Cottontail rabbits, for example, are greatly desired by the beagle owner but frowned on by the orchardist. Each year complaints are received from various sections of the State asking the Department to remove cottontails that have become so numerous they are destroying shrubbery, nursery stock, or other farm property. Or beaver. Beaver are delightful to the nature lover and highly prized by the trapper, but they can add to the gray hairs of the Highway Superintendent by flooding roads, and they often bring cries from woodlot owners by flooding out and destroying timberlands. And so it goes with all species of wildlife to a greater or lesser degree.

This problem, intensified specifically by an increase in fox complaints, made it necessary for the Department to employ a professional trapper in each of the eight Game Management Districts. Under the direction of the District Wildlife Field Manager, he handles a variety of jobs. Most complaints involving some investigational work and the issuance of permits are still handled—as in the past—by the regular game protective force; and fortunately many of our game species respond well to controls involving open seasons and bag limits. But still, the nuisance wildlife control men have their hands full, and there is no season of the year when they are not fully employed.

With deer, the complaints arise from many special situations but usually result from damage to farm crops. Most of them have to be handled by the issuance of permits according to which the animals may be destroyed. Investigations are usually made and the permits issued by Game Protectors, although in special cases the Game Manager is involved. Certain spots in the State have developed a chronic deer problem which cannot be handled by routine investigation: of the more than 600 deer damage complaints received during the past year, 420 were from the Allegany District. It is hoped that some effective deer repellents can be developed by research agencies which will keep the animals from molesting agricultural crops. Otherwise more drastic controls will become necessary.

WITH beaver, the problem is to keep them from flooding valuable lands. Various methods are employed to accomplish this. One is to give the complainant a permit to break out the beaver dam in the hope that the animals will become discouraged and move. In some cases the wildlife control men may live-trap the animals and liberate them in a more suitable area. But quite often it is necessary to have the animals destroyed—unless the control can be effected by removal during an open season. This, of course, is only desirable where numbers are sufficient to warrant such action.



Live-trapping beaver is part of the [illegible]

Cottontails cause much concern among orchardists, as well as in parks and tree nurseries, by girdling the trees or eating the small stems. Each winter the problem is handled in many localities by issuing permits to sportsmen's groups, which live-trap the animals for liberation in a more suitable environment. The transfer is often from an area within city limits, where no hunting is allowed, to a nearby section where the hunter can reap the benefit. If there is no interest among the local clubs, the wildlife control man may do the job. This activity in some years has assumed large proportions and has resulted in the removal of several thousand animals.

PHEASANTS, at least at the moment, are not a problem in most sections of the State, although a few complaints come from gardeners in or near the cities. These are usually handled in such a way that it is not necessary to issue a permit to destroy the bird. In some sections of the State live-trapping operations have been carried out to remove pheasants—as in the case of cottontails—from restricted sections to areas where they could be hunted. This activity is now confined to a few of our larger cities.

One of the commonest complaints comes from home owners in the cities who have trouble with squirrels getting into their attics. Routine permits are usually issued granting the owner permission to live-trap the animals and liberate them elsewhere.

In 1947, the task of handling more than 1,000 complaints involving these five game species went along fairly smoothly. Many of the complaints were routine, while others called for special handling such as live-trapping in the case of beaver and cottontails. And a few, of course, could not be solved.

But the big job, one that required over half of the time of the eight nuisance wildlife control men, involved the fox. Here the immediate task was to handle complaints from poultry, duck, and turkey raisers. But above and beyond the immediate task was—and still is—the need to stimulate more interest in the taking of foxes in many portions of the State as a general control measure during this period of high abundance.

This aspect of the problem was handled by teaching farmers, their boys or hired men how to catch foxes that were causing damage. Often it was necessary to spend some time at a farm and actually catch one or two of the culprits. After such instruction the farmer could usually manage to carry on the trapping himself, but to extend the control effort a number of fox trapping demonstrations were conducted with 4-H Club and sportsmen's groups.

Our State trappers provide nuisance wildlife control *when* and *where* it is needed.

In addition, several of the District nuisance wildlife control men were assigned to special fox trapping work. Three were used part-time to help control the spread of rabies by trapping foxes in central New York. Two were assigned to assist in trapping work in connection with the fox-pheasant research work in Seneca County. (See page 22.) In spite of the variety of emergency work which had to be done, the eight men carried out an extensive program during the year in handling their fox assignments. The program of course varied from District to District, as there were practically no complaints in the Adirondacks while over a score were filed in the East Central District.

A total of over 60 farmer complaints was investigated. Some required a demonstration on how to trap foxes. With others it was necessary to spend a day or two and actually trap some of the animals.

During the course of the year fox trapping demonstrations were made before 75 4-H Club groups aggregating more than 500 members. Demonstrations were also made before nearly 1,000 sportsmen and other adult groups at some 50 meetings, and in addition 560 foxes were trapped either in servicing farmer complaints or in connection with rabies control and research investigation.

The total effect of this demonstrational work is undoubtedly important. It is believed that in some instances nearly half of the 4-H boys who received trapping instructions actually went out and trapped foxes. In the Allegany District a check-up of 21 boys revealed that the average take of the group was 10 animals per trapper. One person who had never trapped before attending a demonstration took over 50 foxes during the course of the year.

In the Lake Plains District the 4-H Club agent of Livingston County reported that 16 boys caught 91 foxes from November 1st to December 15th. Prizes for this work were awarded by the Dansville Fish and Game Club, but all agreed that a large part of the success was due to trapping instructions provided by the State trapper, or nuisance wildlife control man.

For Ontario County the 4-H Club also reported unusual success among their members who learned to trap foxes and carried it out as one of their projects.

Among sportsmen's groups there is considerable evidence of increased interest in fox hunting and trapping as a control measure. Part of this is due to interest stimulated by fox trapping demonstrations and by prizes offered to club members. One club in western New York took 90 foxes. The stimulus was provided by prizes offered by a local brewery.

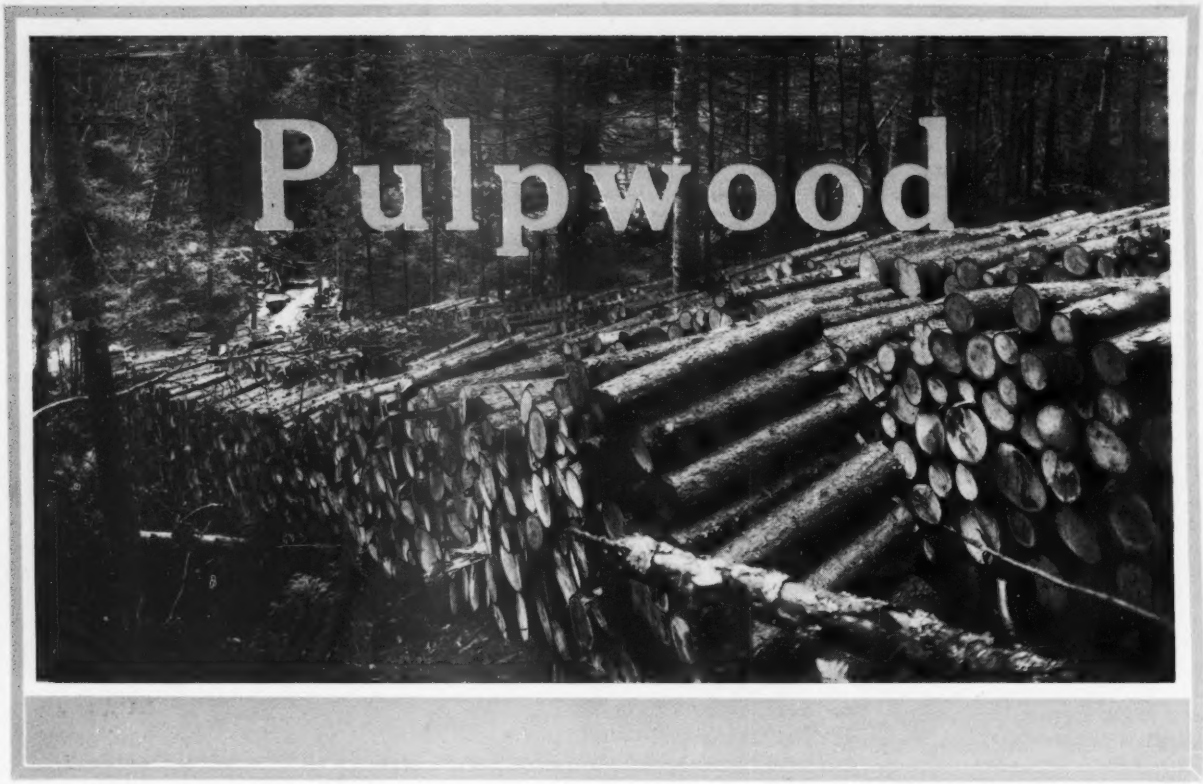
TAKEN altogether, the efforts of 4-H Clubs, sportsmen and individuals probably accounted for the taking of several thousand foxes last year. It is all part of the program to control nuisance wildlife by the control unit, rather than by more haphazard measures. For most species it was adequate. For foxes it seemed the only desirable approach. Certain zones or areas of abundance as well as individual farm problems have not been entirely corrected, but the method now represented by the nuisance control unit seems a sound one.

Control is not needed or desirable in every section of the State. But where there is trouble from a certain species, the nuisance wildlife men, working through the District Game Manager and with the help of the game protective force as well as the sportsmen, can effect the best solution.

The degree of control will depend on the severity of the local situation. But nuisance wildlife problems will always exist in the State under the best of conditions, and the problem is therefore one that will require constant management effort on the part of the Department down through the years.

—BEN O. BRADLEY,
District Game Manager

Nuisance Wildlife Control



DURING the latter half of the 19th Century, there developed in New York a large and flourishing pulp and paper industry. It was based on cheap and abundant water for power and for paper making, excellent transportation by rail and water, nearby coal, and a handy supply of high-quality long-fibered pulpwood stored up in the seemingly inexhaustible forests that covered much of the northern half of the State. Pulp mills were built at good waterpower sites along the big rivers coming out of the Adirondacks—the Black, the Oswegatchie, the Raquette, the Saranac, the Bouquet, the Hudson. Upstream from the mills were vast tracts of company-owned timberland.

The lumberjacks went into what was then quite literally a trackless wilderness. They built camps, and cut out logging roads. Pay was low, hours long and living conditions primitive; often unnecessarily so. The timber was felled and cut into long logs, (mostly 13-foot) which were drawn down with teams and landed on the ice of drivable lakes and streams. When the spring freshet came, the men drove the logs down the swollen streams to the sorting booms. The life of the lumberjack was romantic, all right—brutally hard work in the worst weather and at great risk of life and limb.

Later, the mills began to demand cleaner wood, and it became standard practice to fell and peel the trees in spring and early summer, when the bark loosened easily. As this was done on a piece-work basis, the choppers cut the trees up into 4-foot lengths and piled them in the woods. Gradually, long logs gave way to 4-foot wood, and water transport gave way to mechanization. Finch, Pruyn still drives the Hudson, and Gould the Moose, but most pulpwood now comes to the mill by truck, railroad or boat.

Unfortunately, the industry was based on the liquidation of timber stands whose relatively heavy volume had been accumulated over several centuries or more, rather than upon the growing capacity of the land to produce a continuous crop. Over-cutting, fire and the unhappy tendency of spruce, when repeatedly cut to a diameter limit, to disappear from the mixed-timber types, have seriously depleted our resources of long-fibered wood.

Currently, New York still leads the nation in total *paper* production. But, in the last quarter-century, she has lost almost half of her pulp mill capacity. The water, the railroads and the coal are still there; the markets are better than ever before. But the local supply of spruce has dwindled. All but a few of our mills are now heavily dependent upon imports from northern New England and from Canada. Naturally, their managers are much concerned about the future of their supply of raw materials and particularly about the supply of long-fibered woods.

Now then, pulp and paper mills represent very large capital investments at certain favorable sites where waterpower is available. They cannot readily be plucked up and moved. When they become uneconomical to operate or when their wood supply fails, they are junked, at great loss to their owners and with tragic consequences to the towns left without this source of employment. Consequently, the mills have reached out farther and farther in search of wood, paying higher and higher transportation costs. Inevitably, this has brought higher prices for paper—that indispensable product that we use so unthinkingly in so many ways and in such vast quantities.

FORESTERS have been keenly aware of this problem for a long time and have devoted much thought and effort to its solution. They have developed cheaper and more efficient methods of lumbering and closer utilization of the trees cut, all of which has helped to stretch the timber supply. In the reforestation of idle land, they have planted important quantities of white and Norway spruce, both superior long-fibered pulpwoods. Some advances have been made in the mechanical removal of bark from pulpwood, both in the

woods and at the mill. The pulp mill men have learned to use more unpeeled wood. And the paper chemists have made great progress in the pulping of the less commonly used species and in the use of increased proportions of short-fibered wood.

The simplest is to press the wood against a moving grindstone; hence the product is called "groundwood." Only a little of the total wood substance is lost, so yields are high. "Defibrator" wood is also reduced by a mechanical process that gives a high yield of coarse fiber suitable for insulation and for saturating felts, which are the bases of roofing and linoleum. On the other hand, the chemical pulping processes separate the wood fibers by dissolving out the lignin which binds them together; in consequence, the tonnage yield of pulp per cord of wood is only about half that of groundwood. Sulphite pulp, made from softwoods, is the finest product, while sulphate or kraft pulp makes a strong brown paper. And when it comes to the pulping of hardwoods, the soda process is used. It might be well to explain at this point some of the methods used to reduce wood to pulp.

TO FIND out just what their pulpwood requirements would be for 1948, the Conservation Department sent out a questionnaire to the managers of the 33 pulp mills now operating in New York. Two questions were asked: "How much of what kinds and classes of wood do you expect to use in 1948?" and "By what processes will you reduce it to pulp?" We hoped that the answer would give us a clear and up-to-the-minute picture of the mechanical equipment available for pulp making at the several production centers and of the wood supplies, from whatever source, needed to sustain the mills.

The response to our questionnaire has been most cordial. We have received detailed data on pulpwood needs from the men in the best position to know the requirements, the mill managers. Every one of the 33 mills circularized answered our queries, a remarkable response. Also, the managers went to considerable pains in helping us to break down the requirements by species and classes. Our thanks to them for their help.

The summary shows that 25 mills are making groundwood, nine are making sulphite pulp, three soda pulp, one makes sulphate and two defibrator pulp. Not only are the groundwood mills the most numerous, but they also consume the greatest volume of wood and the highest proportion of spruce.

For 1948, it appears that the pulp mills in New York will buy and use a total of 939,700 cords. Despite the considerable research and effort that has been done to find and apply substitutes, spruce and balsam, peeled in the woods by hand, are still the backbone of our pulpwood supply. The 668,500 cords of these two species that the mills expect to use this year represent about 71 per cent of all the wood used. In the days when wood was abundant the paper makers discriminated against balsam but, since the war, spruce and balsam have been sold together. Next in importance is popple, of which 152,000 cords will be used, about three-fourths peeled and one-fourth rough. "Popple" is a woodsman's term and includes principally the wood of two species, quaking aspen and bigtooth aspen. Both of these are upland trees that come in following fire or heavy cutting. A small quantity of eastern cottonwood, cut from the flats along the Hudson River below Albany, is included. Hemlock accounts for 54,100 cords, two-thirds of which will be bought with the bark on. A number of species, collectively known as Northern Hardwoods and including principally beech, the birches and the maples supply the relatively small amount of hardwood pulpwood now being used; only 54,500 cords, substantially all of which is purchased as rough wood.

The prospect is that only two mills will use white pine in 1948. During the war, a considerable amount of this wood was used, but it has certain conspicuous disadvantages as a pulpwood and its use has been discontinued by the mill which was formerly the biggest consumer.

It will be apparent that the big job for the foresters will be to grow more of the much needed long-fibered woods, particularly spruce. This will take a lot of doing but it is not impossible. The problem may be approached from several angles. First, we shall have to log our spruce forests in such a way as to keep them growing spruce at maximum speed, and frequently enough so as to salvage trees before they die of natural causes. We will continue to plant sizeable quantities of trees which will yield long-fibered wood. We will also try to use in forest planting more of certain species besides spruce, notably Japanese and European larch, which seem to offer promise of rapid production of high quality pulpwood. At the same time, we must begin the painful process of reversing Nature's trend to hardwood; good softwood land now occupied by weeds must be reclaimed for spruce and balsam. But this is a long term process. Along with it will go certain changes in paper making which will permit the use of increasing quantities of some of the woods now little used, particularly hardwood. There may also be a trend toward using more of our spruce for high-quality uses.

What is the future of New York's pulp and paper industry?

Can our forests sustain the industry at its present level?

Would it ever be possible for New York to sustain, unaided, its present pulp mill capacity? It seems likely that it could be done, along these lines:

We now have ten million acres of actual and potential forest land outside the Forest Preserve, covered with a great variety of forest cover, some good, some bad, but all capable of better things. From this we shall probably have an excess of the minor pulpwood species for a long time. At least a million acres of privately-owned land in the Adirondacks grow spruce and balsam naturally, at the rate of one-fourth of a cord per acre per year. That gives us a quarter million cords of annual growth. In central New York, around the fringes of the Adirondacks, in the middle Hudson Valley and along the Massachusetts and Vermont lines, are at least another million acres—with better transportation and with much better timber-growing capacity—that can grow planted spruce, and at the rate of a cord per acre per year. If we could get only half of this latter area working at capacity, we could balance our budget on long-fibered wood.

BUT THERE'S a job to be done. The task of putting our forests in shape to supply the pulpwood—particularly spruce—for a soundly based and permanent paper industry will take time and patience; time to give small trees a chance to grow and patience to wait until they are ripe before cutting them. It will also take money and brains and a lot of hard work. It has taken our forefathers, their cattle and their wildfires, two centuries to put the woods in their present condition. It is unreasonable to expect to undo that job easily or overnight. But certainly the Empire State has what it takes—if it sets itself to do the job.

If we succeed, New York's forest land will contribute far more abundantly than it now does to the life of our people. It we fail, there will be quite a few paper mill towns and a lot of timberland that we could give back to the Indians. —DAVE COOK

Ski Touring

by Hal Burton

JUST a few weeks ago, while less fortunate skiers were sliding around on hard-beaten slopes and dodging the bare spots, I decided to go back to the High Peak country in the Adirondacks to see what I could find.

What I found, on the Wright Peak Trail near Adirondak Loj, was a foot or more of the finest, silkiest and deepest powder snow, of a quality such as one rarely finds even on the Alpine meadows of the Rocky Mountains. On each turn, running down to the valley after not too long a climb, the snow parted like spun sugar beneath the skis. On the straightaways, it streamed out behind the skiers in our little party in a shimmering cloud.

There can't be better skiing, we agreed, but there was—the very next day. Frost crystals had sifted down during the night, half burying our uphill tracks. We climbed a little higher, to the mid-point of the trail. Then the snow was so deep, and the effort was so great, that we reluctantly gave up. Down below us—it almost seemed as if one gelandesprung would cover the distance—was the shimmering whiteness of Heart Lake, with Whiteface raising its symmetrical cone off in the distance.

On the run down, with snow almost to our knees and the skis buried, I suppose that each of us should have given thanks to the pioneering spirit of the Conservation Department for having realized that the touring skier deserves a little corner of the mountains untrammeled by ski lifts and unbeaten by crowds. We were busy going down Wright Peak, but we thought of it later. Most of the "downhill only" crew may have forgotten by now that this winter marks the 10th anniversary of the Conservation Department's ski trail program in the Adirondacks. We didn't.

What days those were, back in 1937-1938! Bitter hearings before the Commissioner, protracted studies to make sure that no innocent tree was cut down, measuring and remeasuring of widths to guarantee that these didn't infringe on the Attorney-General's ruling permitting the construction of ski trails "of a minimum width for safety."

Some time around Christmas, 1937, the first skiers went up Mt. Marcy on the first ski trail in the High Peaks. Thousands have followed in their tracks; thousands more, over the years, will travel out across the rolling hills to Marcy Dam, climb to Indian Falls, and pause for a look at the magnificent vista of the towering MacIntyre Range.

In fair weather or foul, they will work their way up past Plateau Camp, where the snow lies 10 to 12 feet deep in mid-winter, climb up through a frosty paradise to timberline, and then lean into the wind for the last struggle to the top.

Ski touring in the high peaks, hard work though it is, still has a magic quality. To climb Marcy on a crackling day when the spruce are blue and the mercury is 20 below zero; to work up through the curves on Wright Peak, and burst out on a panorama of wild grandeur; to wander out Indian Pass way, up the Klondike, or through the icy cul de sac of Avalanche Pass—this is like opening a door into a magic kingdom.

Lifts? Of course, they are fine. Tows? They have a place, too. On Whiteface Mountain, where the Conservation Department is establishing a "downhill only" center against tremendous handicaps, there will be occasional days when the snow lies deep and the frost hangs thick on the upper fringes of the chair lift area. Yet, inevitably, there will be periods when thaw, freeze and the pounding of skis produce ice, crust, or simply hard-beaten snow.

At times such as these, it is well not to forget that the Department has made provision for skiers who are willing to work a little for a big reward. Marcy is a long ski tour, but practically always there is good snow somewhere up the trail.

As for downhill running, few trails offer as much opportunity to both novice and expert as does Wright Peak. In two and a quarter miles from its 4,585-foot summit, this run plummets 2,300 vertical feet. The lowest mile is ideal for the novices—wide, sweeping turns, long, gentle straightaways. The upper one a quarter miles challenge the most skillful expert.

OF course, this section is narrow, by ski lift standards. It could be made more useful with some judicious widening. Nevertheless, the skier who dives down from the crest, with Marcy over his right shoulder and the glittering cone of Algonquin at his back; who swings and twists down through the gnarled spruce, and then takes a breathless plunge down through the Hairpin, or S-Curve, will always remember the experience.

Year by year, the ski-touring trails of the High Peak country attract connoisseurs of the sport. Sometime, when the snow is icy in Placid, or the trails at Whiteface are packed to a boring smoothness, point your car toward Mt. Marcy, get out on your skis at Adirondack Loj, and go a-touring.

Maple Syrup

by Prof. J. A. Cope
Professor of Forestry
State College of Agriculture

Sap house in full blast

IN the long and imposing list of products of the soil in the "State that has everything," food from our maple trees ranks high in volume and value. In fact in the United States as a whole, only Vermont outranks New York in the gallons of syrup produced annually.

Since quality in maple products is a matter of proper manufacture rather than geography, New York can and does produce some of the best maple syrup, as well as plenty that is not so high in quality.

New York's ranking in the production of this luxury commodity is due, of course, to the wide distribution throughout the State of the sugar maple tree. There is not a county in the State outside of Long Island where this most valuable of our native hardwoods does not grow, and where it grows, there it can be tapped to yield a delicious, delicately flavored liquid which—when sufficient water is removed—becomes the best known accompaniment of hot cakes and waffles.

The sugar maple is by preference a northern tree, and it is found in greater abundance at the higher elevations. Consequently the great producing areas for syrup in the State are three: the Allegany Plateau in western New York, the Catskills and surrounding foothills, and the whole of northern New York.

The manufacture of maple syrup from maple sap has from pioneer days down to the present been exclusively a farm enterprise, and necessarily so. The operating season is excessively short—one month out of twelve—so that no one but a farmer could so well integrate "sugaring" with other work. The same labor, teams, and tractor can readily be changed from one type of work to the other. Processing from sap to syrup must likewise be done on the farm. Maple sap is at least 96 per cent nothing but water, weighing eight pounds to the gallon, and any attempts to haul such a cargo any distance by tank truck to a centralized processing plant would be bound to put the operator in the red. So for that reason, when you ride through "sugar country" come March, you will see smoke and steam rising from a sap house on almost every occupied farm.

Census figures indicate there are some 9,000 farmers who each year engage in the production of maple syrup in New York State. On the basis of a 10-year average, the number of buckets hung by these 9,000 producers has been just around three million. The average production for this decade was about three quarters of a million gallons of maple syrup, or about one quart per bucket. It would appear, therefore, that in an average season, the man who hangs 400 buckets can expect to make 100 gallons of syrup.

PRODUCTION records for the last few years have not stacked up well against this three quarters of a million gallon average. As far as our records go, the lowest volume of syrup ever produced in the State was in 1945, when in addition to the acute manpower shortage on the farms (only a little over two million trees tapped), we had one of the shortest and poorest seasons on record. Weather, which is an important factor in the production of all farm crops, can certainly make or break the sap yield. Unless during those transition weeks from winter to spring there is a succession of below-freezing temperatures at night, followed by above-freezing temperatures during the day and accompanied preferably by sunshine, there just won't be any run of maple sap. The average season is composed of a series of seven or eight runs. In 1945, many producers had only two. In 1946 there was more manpower available, and consequently the number of trees tapped increased by 400,000 and the yield was greater by just the amount of extra buckets hung. But still, 1946 was far from an average year for maple products.

After two such disastrous seasons producers were sorely tempted to sell out to the lumbermen, who were paying the highest prices on record for maple logs. Some of them did sell out, but there were enough who held on to bring the number of trees tapped in 1947 up to about 2,900,000. The sugaring season that year as a whole proved more favorable, and the total State yield reached 684,000 gallons. But there are other reasons why the 1947 season will long be remembered by producers. The snow was so deep in the woods that when those alternate periods of above and below-freezing temperatures came in the spring, farmers just couldn't get into the woods to tap. One farmer reported spending four days with team and tractor, just shoveling out roads so he could collect sap.

But when the checks came rolling in all the hardships were forgotten, for the 1947 crop brought the producers the all-time high figure of $5.00 a gallon at the farm. There was a most unusual combination of circumstances—a short crop of maple products; ceiling prices lifted on maple syrup, but sugar rationing still in effect; and the buying public sugar-hungry and with ample funds to satisfy their appetites at almost any price. Cost account records kept by key producers throughout the State in 1947 showed that the return for engaging in this business of sugarin' was $2.00 per hour.

So maple syrup is an important farm crop in New York. It is likely to continue in that status, because farmers are now giving greater attention to proper care of the sugar bush, and also because griddle cakes will never taste the same without "genuine New York maple syrup."

THE MAN from South Glens Falls was enjoying his trip to New York. Among other things, he had window-shopped up Madison from 42nd Street and had reached a temporary lull at 61st, in front of a swanky store dealing in fancy foods.

He looked over its display carefully, wondering what it would be like to dig into such delicacies—and then his eyes popped. There in the lay-out were a half-dozen pheasants, a couple of pair of mallard ducks—even quail. Right out in the open. For sale!

"Boy, oh boy," said the man from South Glens Falls, "wait'll the Conservation Department hears about this!"

Then, appointing himself a committee of one, he rushed off to give the Department's New York office what he figured to be the hottest tip since Black Gold won the Kentucky Derby.

What happened after that came as a shock to the man from South Glens Falls, because nothing happened. The store he had put the finger on is still in business and still selling game. And it's all legal procedure, done under the watchful eye of a small staff of men who have a law enforcement job unique in conservation circles. That job is differentiating between the sale of domestically raised "wild" game (or imported species) and the real stuff that belongs to State and people.

According to Inspector Harold R. Canepi, director of this staff, the man from South Glens Falls was not unlike a great many other average folk who are pretty much in the dark when it comes to understanding traffic in game in the Big City—but who are, at the same time, conscientious and co-operative enough to see if things are being run by the book.

"We get dozens of calls like that every year," says Mr. Canepi. "Nine times out of ten the suspicions are unwarranted, but it's that tenth time that counts and the more calls we receive the easier it makes our job."

The sale of game in New York City is big business. It runs into hundreds of thousands of dollars annually. It is concerned with commercial game farms in and outside the State; with importers, wholesalers, retailers, hotels and smart restaurants, and with the man who enjoys a bird now and then but just can't seem to get it during open season.

It is also big business for the Conservation Department's Bureau of Law Enforcement, and a responsibility that has no counterpart in any other corner of the globe. Just as New York is the hub of everything else in the world, so too, it is with the importation and sale of game. Consider these figures:

Back in the tantalizing 20's, before Wall Street's Black Monday, the Department in one year had the task of supervising the marketing of 169,109 pieces of game ranging from elk on down to quail. Three-fourths of this game was imported, either from other states or from foreign countries.

During the depression year 1936-37 imported game dropped to 92,059 and domestic jumped to 46,716. World War II wrecked the foreign trade; from '44 to '45 only 2,000 pieces reached the States, and they were largely grouse, sneaked through the sub zone by enterprising British, along with their Scotch. In that same year the figure on domestic game was 43,190.

Today, with foreign trade still in the dumps and commercial game farms springing up all over the lot here in the States, the picture has changed tremendously. During the fiscal year 1946-47 the Department's New York office checked 93,344 pieces of domestic game. In other words, we are today raising and consuming nearly four times as much "wild" game here in New York State as we were during the lush days of a quarter-century past.

That one factor has heaped a mountain of misery on Mr. Canepi and staff. It's easy enough to spot a European roe deer, a Scotch grouse or a Scandinavian black cock. You know what they look like and where they come from. But when you get such items as whitetailed deer, and pheasants and mallards, it boils down to the question of determining if they are products of legitimate game breeders or something swiped from the people's stock.

THIS JOB can't be done with mirrors; it's done with tags. Your Department has two types—one for imported game, another for domestic. Every piece sold must bear one or the other—or else. Since there are only two men in the New York office who supervise these sales (they're George Stamir and Bob Vadersen) it would obviously be impossible for the Department to tag every deer, bird or what have you. So, here's how the system works:

There are roughly a half-dozen big

GAME for GOURMETS

outlets in the City for the sale of game, and each is licensed. When they receive shipments they are expected to report them promptly; it saves embarrassment and . . . er . . . difficulties. These big dealers are fundamentally honest. It wouldn't pay them to be otherwise, because the proper tags for their game cost only a nickel apiece, and their licenses are at stake as well.

When the Department is advised of a shipment it provides tags for the number of pieces of game at hand, but only after a careful check-back of shipping tags and receiving slips. Game imported from foreign countries or other states is tagged on arrival; that coming from game breeders within the State is pretagged at source and the Department must be advised of its destination.

The rest is simple but painstaking. It involves constant spot checks of retail stores (of the type our man from South Glens Falls was interested in); of restaurants and hotels. If Protectors Stamir and Vadersen bump into an untagged deer or quarter of venison, things rest none too well for its immediate possessor or for the wholesaler who handled it.

Still and all, there are few violations, and in a city the size of New York that is saying a great deal. It isn't to be expected that two men could plug all the leaks, but Mr. Canepi reports that a year's major infractions of the law can be counted on the fingers of two hands. Most violations are mistakes; the majority can be traced to the carelessness of ill-informed employees all down the line. A warning usually suffices. The one factor that has complicated enforcement is the growing tendency on the part of restaurants and hotels to buy direct from small individual dealers, rather than from big wholesalers.

A peek at what New York consumes in the way of game should be enlightening. Pheasants are most popular because they are easiest to get (from game farms, at least!) Before the war China supplied the bulk of these birds, and it was a common occurrence for Department personnel to find them still carrying the horsehair snares which started them off as "*faisan* under glass" at the Stork or Club 21. Today the multitude of commercial game farms here in the States are filling the gap that war opened up in the foreign supply.

Scotch grouse, raised purposely for export by English breeders, are highly favored, as is our own ersatz mallard. The Scandinavian countries ship us black cock, ptarmigan, and the giant capercailzie, the world's largest grouse, cock birds of which will run from 12 to 20 pounds.

From the Low Countries come plover and woodcock (but don't ask us how), and from the Himalayas and some farms here in the States the fat and sassy chukar partridge. Some Southern game breeders provide quail and turkey. There are also such items as buffalo and elk from western game farms, and one Catskill firm raises and provides bear for New Yorkers who wish to go whole-hog. Muskrats, popularized as "marsh rabbit" during the days of the bowler hat, have passed out of the picture, and 'possum and 'coon are in poor demand.

METROPOLITAN tastes do, however, run to even stranger tidbits on occasions. Every so often someone will pop up with a yen for an armadillo steak, an iguana (lizard) for broiling, or a manatee (sea cow) roast—all of which, incidentally, are excellent fare. But the first two are impossible to get unless you put in your order months in advance, and if you get caught eating the latter you'll wind up in jail.

When it comes to exotic chow of this type, Mr. Canepi's office often finds itself in the role of an information bureau. When people can't find what they want, many of them fall back on the Department to supply the leads. One such call, particularly fresh in Mr. Canepi's mind, came from a man who wanted a whole wild boar—in a rush. Mr. Canepi was at a loss to tell him where to go—except to one place which he didn't want to mention.

We've purposely held venison until last on this list because it demands special consideration. All in all it is probably the biggest headache with which Mr. Canepi and his staff are obliged to contend. In addition to being highly popular it's also easily available. There are numerous legitimate breeders both in New York and outside the State which supply the metropolitan market; there are also upstate jackers and dealers who practice sleight-of-hand with licenses and tags and foist off "hot" deer to the trade. It was common, for example, for any New York wholesaler to receive a call a week during the past open deer season from pirates offering "bargains" in illicit deer. The only catch—so far as the Department was concerned—is that they never gave their names, and the trade just wasn't interested in buying that type merchandise. But on the whole, darned little gets by.

As we said near the start of this piece, the traffic in game in New York City runs into money. It might be well here to quote the current retail prices of such larder:

If you lean to pheasants, be prepared to spend $15.00 a pair for cock and hen. Quail will cost you $7.50 a pair, or roughly 45c an ounce. Mallards are $9.00 a pair; chukars $13.00. Venison steak is $2.75 a pound, the saddle $2.50. And in the restaurants more. Much more. Match that against your $1.65 hunting license, or the $1.25 additional which may get you a deer.

Happily, the Conservation Department does not concern itself with food prices. Nor does its New York office. That would be asking a little too much of a unit whose job is enforcement, and whose supervision of the sale of game in the metropolitan area is just one of many chores.

"Just a minor chore", says Inspector Canepi. "But gosh-awful big for its size!"

All of which should clear things up for the man from South Glens Falls and at the same time let him know that he did the right thing when he 'phoned.

—Bob Bush

The sale of commercially-raised game in New York State—and particularly in New York City—is big business. Likewise it is big business for your Conservation Department, whose job it is to supervise this traffic and see that no publicly-owned game slips through along with it.

This article tells how it's done and adds some enlightening information on metropolitan tastes.

Lake Ronkonkoma

THE white man has inhabited the vicinity of Lake Ronkonkoma for nearly three centuries, but Long Island's largest fresh water lake is still a shining example of the theory that history repeats itself.

In the days of the Indian, Ronkonkoma, or Sachem Pond, as it was then known, was something of a boundary for the territories of four tribes of Long Island redmen—the Secatogues, Unkechaugs, Setalcots and Nesaquaques. And today Ronkonkoma is the dividing line between three tribes of Long Island townsmen—Brookhavens, Islips and Smithtowns.

In the past century the lake, which is about a mile and a quarter long and a mile wide, has been the subject of lengthy dispute concerning its position as a boundary line. The question of which town its underwater lands belonged to was the basis of long litigation, at the conclusion of which, several years ago, it was ruled that the lake itself was entirely within the Town of Islip.

For several generations Ronkonkoma, situated about 50 miles from New York City, was known as the "lake of haunting mystery." The many legends woven around the lake are outnumbered only by the variations of its name. "Sachem Pond" is merely one; this is found in the survey made in 1670 by Robert Ryder, who is said to have been the first school teacher in nearby Setauket.

Benjamin F. Thompson's "History of Long Island," published in 1843, refers to Ronkonkoma as the "Great Pond." But there are many others. In the course of his years' research, Brookhaven town historian Osborn Shaw, a noted authority, found that Ronkonkoma had been spelled 14 different ways in the official records dating from 1664 to the present time.

English translations of these names are, of course, equally numerous. Real estate men at the lake resort, and many of their fellow villagers have long since accepted the colorful translation, "glittering white sand." Others were pleased with the version, "healing waters." Still others like to quote Prof. E. W. Horsford, of Cambridge, Mass., who took the name, "Ronkonkomack," and broke it down in this manner:

Ron—"noise of flight" (as of a bird); konk—"wild goose"; omack—"inclosed place." This adds up, Professor Horsford concludes, to "The wild goose resting place."

But considering the history of Ronkonkoma from the geographical viewpoint, the most logical translation of any of its names appears to be "boundary fishing place."

As it has been to the white man for many generations, Lake Ronkonkoma was a puzzle to the Indians. They could not understand whence came its waters, or where its waters went. This "mystery" figured in one of the best known Indian legends about the lake.

The story concerned a young Indian chieftain who ended his life in the lake's waters because of unrequited love. Realizing his suit was hopeless the young chieftain boarded his canoe, paddled to the center of the lake, then plunged a knife into his heart and dropped over the side into the blue waters. The chieftain's body, the legend continues, later was found in a Connecticut lake.

There were other endings to the story which had the body being found in other waterways equally distant. The Connecticut angle may be a distortion of one climax to the legend according to which the body reappeared in Connetquot River, which has its start a few miles west of Ronkonkoma.

In any case, all the variations of the story merely "substantiated" the theory held for many years that Ronkonkoma was bottomless. As for this belief, there was the long-told story of men dropping 1,000 feet of fishing line, heavily weighted, into the lake, and failing to find bottom. This, too, has been found to be without foundation. (The story, not the bottom).

The vast collection of myths about "bottomless Ronkonkoma" was knocked into a cocked hat less than a half-century ago, when the old City of Brooklyn, in its search for additional sources of water supply, made a survey of the lake.

Hal Fullerton, then serving as Long Island Railroad Experimental Farm Director and long an authority on Ronkonkoma's history, suggested to the engineers they might accomplish something by deep-sea sounding methods. The plan was tried, and it was found that the lake at its deepest point was about 70 feet. Even this depth was considered extraordinary because of the fact that Ronkonkoma is only about 60 feet above sea level, with no apparent source of supply.

LATER, the United States Government made a geologic survey of Long Island, including the Lake Ronkonkoma area. Dr. A. C. Veatch, one of the engineers assigned to the project, later announced that "Lake Ronkonkoma is really only a great natural well, which taps the underground water table. The underground water table is its only source of supply."

"I believe," Dr. Veatch added, "it would be virtually impossible to drain the lake, no matter what methods were attempted. Years of steady pumping would prove fruitless. Lake Ronkonkoma doubtless was formed by an iceberg in the glacial period. The ice drilled this well and when it melted it left a hole which filled with water from the underground water table. That accounts for the water always being fresh."

Dr. Veatch didn't say so, but it also partially accounts for the great variety of fresh-water fish that have lived in the lake at one time or another. Unfortunately, an important part of the list of fishes inhabiting Ronkonkoma survives only as printers' ink, on the record. Seven of the 14 species exist only as mementos of the optimism of early fish culturists and Ronkonkoma enthusiasts. These seven are: landlocked

Next Issue: Indian Lake

salmon, rainbow trout, brook trout, lake trout, whitefish, sauger and pike-perch. Occasional brook and rainbow trout have been caught but have provided no real fishing since the establishment of bass about 1871. Saugers (sometimes called sand pike, a close relative of the pike-perch) were temporarily common after stocking about 1897 or 1898, but have been unable to maintain a foothold. Pike-perch were stocked unsuccessfully in 1931. There is no water suitable for lake trout or whitefish here, and their stocking began and ended as an angler's dream.

Largemouth and smallmouth bass, yellow perch, rock bass and bullheads provide the fishing now. Of these probably perch and bullheads are the only native species. The bass fishing is slow but sometimes pays off with a big fish, as smallmouth bass up to eight pounds have been recorded, and a few largemouth even heavier. Constant use of the almost continuous swimming beaches prevents growth of shore vegetation and there is no place for young game fish to hide; so here a few big ones eat a lot of little ones.

A fair number of killifish can be found in the very shallow water and these provide a little food for the bass and perch. The last member of the association is an isolationist rejoicing in the name "fusiform darter," which sometimes attains an extreme size of almost two inches. This cheerful little aristocrat has been found in two other places on Long Island but nowhere else in New York State.

BUT fishing runs a poor second in this lake with other forms of recreation, especially with swimming. Whether the fish are constantly frightened, or possibly mesmerized by mermaids, the angler here has plenty of chance to exercise his most despised yet best advertised virtue—patience.

In the past 30 years, Ronkonkoma has been highly developed from the realty viewpoint. But the real estate men who sound its praises have much to shout about. For one thing, it is something of a year-round resort.

Up to the time the real estate man made his appearance in a big way, the lake was surrounded by many large estates. But the promoter of homesites has changed all this. Today more than a thousand bungalows and large homes, many of which are used around the calendar, comprise the several villages that are scattered around the lake. All this construction, however, has but little marred the scenic beauty of the lake.

Ronkonkoma's annual program, which includes bathing, boating and fishing, attracts many thousands from the New York City area each summer. Ice-skating, scootering, and ice-boating are the wintertime drawing cards, which pull enthusiasts from the length and breadth of Long Island, as well as from upstate New York and New Jersey.

Before the advent of our present-day ice companies and refrigerators, the lake's ice supported a small local industry. Several ice houses were set up on the shores, and each winter groups of men would be employed to cut and store the crust that formed on the lake. Fresh-water ponds suitable for this sort of enterprise were never too numerous on Long Island.

Much has been said and written of the rise and fall of Ronkonkoma's waters. The theory was long held that the rise and fall happened at set intervals of seven years, but Mr. Fullerton thought differently. "There are periods of the year," he said, "when the lake rises, and other periods when it falls, but always the rise and fall has no apparent connection with precipitation in the vicinity."

C. Renwick Raynor, who follows in the footsteps of his father as an authority on their home village of Lake Ronkonkoma, tells of the time, in 1891, when Ronkonkoma's waters rose without any apparent reason to a point above the level of the road that now borders the east side of the lake, killing trees that were up to 100 years old. But aside from that incident Mr. Raynor states that the lake's level has remained fairly constant during his association with it.

THE Indians left more than an assortment of names at Ronkonkoma. Over a period of 40 years, E. Bassford Hawkins, member of an old family at the lake resort, gathered several thousand Indian arrowheads of varied sizes within a four-mile radius of the lake. The collection recently was presented to the Lake Ronkonkoma Library.

Ronkonkoma has attracted all kinds of people. One of the early large estate owners at the lake was Maude Adams, famed American actress. She later contributed her vast property to the Religious of the Cenacle, a society which established a Retreat House 25 years ago about a mile east of the lake. Since then, more than 50,000 women have participated in retreats there.

But Ronkonkoma is not as quiet a place as this activity might suggest. Before World War II, business used to hum at Lake Ronkonkoma mainly during the summer months. Now it "hums" year round, thanks to MacArthur Airport, which is Islip Town-owned and is one of the largest fields on the East Coast. It lies about a mile south of the lake's shores, and houses a branch of the Lockheed Aircraft Co. and other airplane firms.

So, in contrast to "the wild goose resting place" by which Ronkonkoma was once known, MacArthur Airport has made it the resting place of considerably bigger birds.

BROOK

One of our original and

THE MAN on our cover is catching a nice mess of fish. Back in 1856, when the picture was painted, that was all right on Chateaugay Lake, but if he tried the same thing today he would feel the hot breath of the law instead of a cold Adirondack wind on the back of his neck.

For a closer look at what Mr. Tait's fisherman is catching, you could turn to the back cover. There you will find a portrait of one of New York's best loved fresh water citizens.

According to geologists, the final retreat of glacial ice from New York State occurred too long before 1492 to mean much to most of us. Suffice it to say that very soon after waterways opened up the more hardy species of fish life moved into them, and in the van of this colonization movement may well have been the brook trout.

Along with April will come "opening day." Whether or not the last of this winter's ice and snow (at this writing a reasonable facsimile of the Ice Age) will have retreated by then, millions of earthworms will accompany thousands of hardy anglers in an onslaught into the domain of the speckled trout.

But no matter what the weather on opening day, brook trout will outnumber all others in the aggregate catch. For the speckled trout, as many prefer to call him, is not only the most widely distributed but the most co-operative of salmonoid fish. Everyone has seen pictures of the barefoot boy with willow pole and 10 cent tackle (25 cents today, Sonny) whistling nonchalantly with his string of brookies while the superbly equipped man from the city gives with a look of bewildered envy. The truth is that that brook trout cares nothing for tackle. In catching them "know how" is less important than "know where."

If you're not one of the local boys and are not too confident of your angling prowess, just remember that brook trout can be caught by anyone and on practically anything. It is nearly unbelievable how pond trout will follow a tremendous spoon or wobbler, almost as large as they are, and eagerly bite the wad of worms strung out behind it. In both streams and ponds the brookie usually likes a good-sized bait, although on a hatch of flies his behavior may temporarily endear him to the dry-fly purist. The brookie, beautiful but dumb, nurses no grudge against those worthy persons who are somewhat critical of his lack of brains and who prefer to pit their skill against the wily brown. (If you enjoy being clever take up a precision sport like golf, and leave the trout for us dubs). Although the brook trout will always do his best this will not include much brain work, nor does it seem possible to breed caution into him in the hatcheries.

The life of a trout can be understood only by another trout. Humans know him only as a beautiful, lightning-fast game fish who inhabits places that are a joy to visit and who tastes just as good as he looks. He adds joy to our lives by providing the contemplative recreation of angling, but his own life appears to be devoted entirely to the essentials —to eating, growing and reproducing.

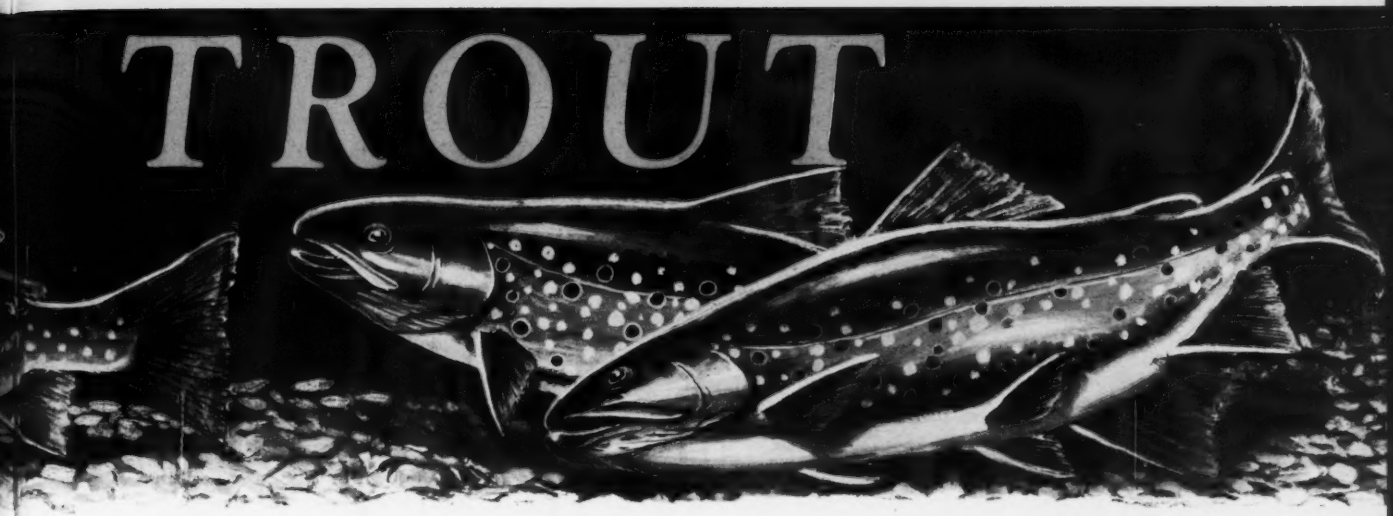
Brook trout eat a wide variety of food—even boiled potatoes—and a listing of all the many insects, fishes and other animals that have been recorded from trout stomachs would fill a chapter. Being adapted to cold water, trout digest their food at a lower temperature than many other species. Fish culturists know, however, that the consumption of food increases as the water warms, although at higher ranges of the thermometer trout show actual distress. On the other hand good aeriation sometimes compensates for this and rapid-flowing streams often have brookies feeding at temperatures of up to 75 degrees. A further disadvantage of warm water is that it often affects the food supply adversely by encouraging chubs and other competitor fish.

THE growth rate of trout is variable. This is in part due to factors of temperature and food supply, but also there may be different "races" adapted to various conditions. Most of our stream trout are small, and can mature eggs when two years old and five inches or upward. In some areas there are sea-run brookies or lake populations of really big trout such as the Maine "square tails" and our own Cranberry Lake fish. But these are exceptions. By and large our stream natives mature rapidly and have a short life span, so that even five-year-olds are rarely found. Heavy fishing often cuts the average span to much less, for trout usually reach the seven-inch legal size in from two to three seasons—and the frying pan soon thereafter. Hatchery growth can be much faster, and fish so reared often attain legal size in one year if the water is not too cold.

The reproduction of the speckled trout is of interest to the angler and naturalist alike, whether this interest is in the renewal of the supply, or in the remarkable adaptions and instinctive behavior displayed during the breeding process. At the top of the page are two pairs of brookies as they look when building nests and spawning.

When brook trout spawn they are as

TROUT



and best loved citizens

brilliant in color as the autumn leaves above them. Many species of fish, the brookies among them, build nests and have developed a complex breeding behavior no less intricate than the spring antics of birds. The "redd" (to use a name given this type of gravel nest) is built by the female with persistent blows from her powerful tail. If in loose gravel, these movements create a pit or hollow several inches deep and proportionate to the size of the fish—who rests in it from time to time during the several hours required to make it.

THE hook-jawed, brilliantly-colored males usually outnumber females on the spawning areas, and no active nest-builder is long unescorted. In fact competition among males is so intense that only a relatively large one can hold the favored position just downstream of the female. Smaller males are chased on sight by the angry defender, whose sides glow with scarlet as if infuriated by the effrontery of lesser fish. In such encounters buck trout often fray fins as well as tempers, for small males return again and again in a prolonged game of tag. If fortunate, an observer may see a real combat develop between evenly-matched males. A challenge by an intruder consists of a definite display of spread fins and bright colors. If neither will give ground a vicious battle may take place, one male striking the other savagely and closing his hooked jaws on the mid-region of the other, who in turn strikes his rival. This strange method of fighting, without defense or dodging, continues until one fish quits.

After some hours, the nest is completed and the female is ready to spawn. When this occurs both male and female trout are side by side resting against the bottom of the excavated pit, and the eggs are fertilized as they lodge among the pebbles. Immediately afterward the female trout dislodges stones from the sides of the excavated area by swimming from side to side, her fins propelling stones toward the eggs. Coarse gravel is thus deposited first, but later the female repeats the more powerful digging activities used in excavating the nest, and moving upstream slightly, dislodges gravel and sand which settles over the former nest pit. Several pits are made before a female spawns all of her eggs, the number of which may vary from 200 to 2,000.

At hatching, the sac fry are relatively helpless but can swim. Just before absorbing all of the yolk, trout fry break through into daylight and are soon actively feeding upon a wide variety of small animal life. Although difficult to see, the fry can be found in most brook trout streams during April or May, especially close to the headwaters. Many soon migrate downstream long distances, even passing over falls and dams. The parent trout seem invariably to select areas near springs for spawning, and the greater warmth of spring water during late fall and early winter is known to be necessary to proper development of eggs. Subsequent wanderings of trout fry are not so well regulated, and many blunder into unsuitable waters where summer temperatures are high.

Generations of New York anglers have eagerly fished for our native trout. Too often he has been taken for granted as something to enjoy without much thought except as to where to go and how to get some bait. The preservation of trout fishing—which means preservation of both fish and favorable environment—is currently receiving more thought, but years of neglect and abuse cannot be remedied in a day. Where gains are made, here and there, the increased trout supply all too often is eagerly flattened out again by ever increasing angling. In fact our civilization is fast forcing the old-fashioned native trout to retreat into the quiet spots, the tiny woodland brooks and ponds.

There is plenty of justification for pessimism with regard to brook trout conservation. The old timers can be blamed for taking wash tubs full of fish and for the great havoc caused by thoughtless introduction of yellow perch, bass and other competitive species into priceless Adirondack trout ponds. Thousands of miles of stream have been or are being civilized or farmed out of existence as trout habitat. Hatchery production, pollution control, and stream improvement have only checked the decline.

FORTUNATELY, there is still much to work with, for there are still trout waters with enough seed stock left to help in building up their numbers. If the brookie only had more brains, and were not so eager to commit suicide on the nearest fish hook. . . .

When you go out this April to renew friendship with this noble little native of the Empire State, have fun, yes—but give some thought as to ways and means to help the brook trout. When you hook one, down under the alders, let his rugged battle to escape remind you of the fight his whole tribe is making. The solution to a decreased supply does not lie in substituting other fish with the idea that the battle to support our native trout is hopeless. Our friend with the speckles never concedes defeat. So why should we?

—JOHN R. GREELEY

1/6th of the State

Part Three

WE BEGIN this article as we began the first of the series, with the Blackwell Place. This is a typical abandoned farm in New York. The property is bounded on the south by Kronk Brook and on the other sides by lines surveyed in the Year of our Lord seventeen hundred and ninety-two, and never surveyed since.

Within these boundaries lies a tract supposed to be a little better than 250 acres, partly old fields now grown up to weeds and brush, and partly woodlot, cut and re-cut, logged and skinned until nothing of value remains.

Also there is a house. It was a fine house once and well built, but it was built on the land, and when the land couldn't support it any longer the house began to crumble. So now the house is mainly beautiful as a suggestion of what it once was, and as a suggestion of what the land was that it was built on.

Do you think you would like to buy the Blackwell Place and try to make something of it?

We will proceed on the assumption that you're at least interested in the idea.

Of our five million acres of abandoned land almost all can be bought. Most of it can be bought cheap. Its apparent bargain value has attracted a good many private purchasers in recent years and there has been a considerable turnover in land as a commodity, the results of which—generally speaking—have not been good. Private acquisition of abandoned land—again generally speaking—has not been beneficial either to the purchaser or to the land.

City people, with a romantic concept of country life, have gone back to the land to farm it, oblivious or ignorant of the fact that the reason the land was abandoned in the first place was that it could not be farmed profitably. (Real farmers found that out and moved on). After a brief tenure these people go back to the city broken in spirit and pocketbook, or still worse, they are trapped on the land without the means to escape.

The land is no better off for their experiment, and it is still abandoned.

Then, in these days of housing shortages, there is the man who accepts 250 acres of land along with the house on it, simply because the deed calls for it. What he really wants is the house; what he buys is a house with a 250-acre backyard. He never wanted the backyard, has no plans for using it and no time or inclination to work on it.

The land is still abandoned, and going back all the time.

Then there is the sharp-eyed lumber operator. He spots a stand of spruce on a hilltop, figures he can get it out, and buys the whole hill because it's going cheap and because title to it will give him a clear field to operate on the spruce without interference or restrictions. He skins off the spruce and anything else he can market, and then either sells the land at whatever he can get for it, or, if no purchaser appears, he simply leaves. The small price he paid for the property was figured as part of the cost of getting out the spruce.

The land is still abandoned, and worse off than ever before.

Also there is the speculator in land. For a long time it has been common to regard the ownership of land as a hedge against inflation, the idea being that land is a basic commodity which retains a basic or potential productive value in spite of fluctuations in money values. Maybe so. But in any case the proponent of this theory buys the land —perhaps sight unseen—and just holds it against a rainy day.

The land is still abandoned, and deteriorating all the time.

And recently there has been advanced an extension of this theory, according to which land—and particularly remote land back from the highways—will be the only safe investment in the time of anarchy and dissolution that may well lie ahead. When riot squads and itinerant raiding parties ride the highways, the man with his plot of ground back in the hills will be well off. This theory seems to discount the certainty that titles and rights of ownership would be the first things to go under such conditions, but still it has attracted a fair following.

Regardless of the motive for buying, the fact to be faced is this: that abandoned land is a very poor short term financial investment for an individual, and that as a long term financial investment, its value has yet to be proved. If you have money to spend and want to be sure of a return on it, buy U. S. Bonds, not land. If you are willing to speculate but are still out for a cash return on your money, buy securities, not land. Abandoned land in New York is a rat hole down which you can pour almost unlimited quantities of time and money, and when you become fed up with it and decide to sell out, the chances are that in spite of what you've put into it you'll get no more than the original purchase price.

SO the Blackwell Place is not for farming; to buy it for the sake of the house is at best a poor expedient, and no solution to the problem of what to do with the land; to buy it, strip it of whatever merchantable timber may be left, then let it go—should be punishable by law; to buy it as an investment and then simply hold it, without any attempt to protect the investment through the improvement of the land, is a very dubious business venture.

We have found fault with some of the more popular reasons why private individuals buy up our abandoned land. Does this mean that we feel you should be discouraged from buying the Blackwell Place?

It does not—provided you've given the matter careful thought before you act; provided your tenure of the place does not depend on miscellaneous schemes for making money off it; provided you can afford, temperamentally

and financially, to wait a long time for a material return on your investment; provided you, yourself, are prepared to supply most of the manual labor necessary not only to keep the place going, but to put it back in shape; provided your tenure of the place will be an asset, not a liability, to the community.

AND PROVIDED: that your feeling for a "place in the country" can survive frozen pipes in January; snowbound roads in February; floods in March; mud in April; a killing frost in May; black flies in June; Old Friends of the Family, July through October; drought in August; another killing frost in September; school taxes in October; a checkbook over-draft in November; and the winter again, damn it, in December.

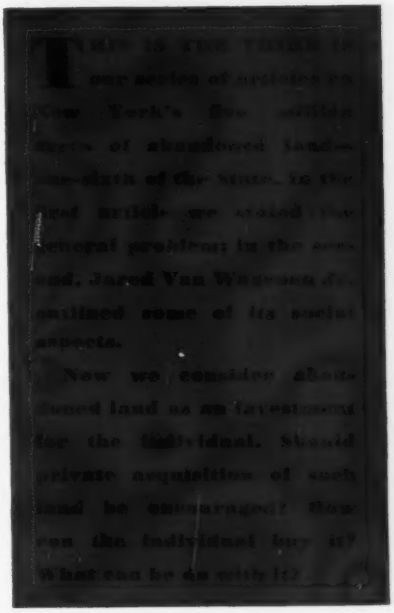
If you are prepared to wade through all this (and no mention was made of the party telephone lines), we will start out to buy the Blackwell Place.

The first problem is to find such a place. That isn't difficult. There is a belt of abandoned land about a hundred miles deep north of the Pennsylvania state line, stretching all the way from Lake Erie to the Hudson River. It includes a lot of the Catskill country. There is another belt, not so deep but just as concentrated, that penetrates and completely encircles the Adirondacks, with a wide arm sticking out to the west through the Tug Hill country toward Lake Ontario. There is a third belt, or rather a narrow fringe, that runs north and south along our eastern border, through the hill country along the Massachusetts and Vermont lines. And besides these, there are isolated sections of abandoned land in almost all of our counties except the metropolitan and Long Island ones. All you have to do to find a Blackwell Place is turn off the main highway and head up—into the hills.

As to a particular piece of land, that depends on the locality you prefer. If you are familiar with our State, then there is probably some section of it that you know and like better than others, and you would be wise to settle on that section rather than follow the recommendation of a friend who tells you that Oneida County, say, is nice. In any case, having narrowed your choice down to a particular area, there is only one satisfactory way of finding the particular place—go look for yourself, and take plenty of time. If you don't know where to start, get in touch with the Extension Service's County Agent, or with this Department's District Forester. Both of these men have a long-standing acquaintance with the abandoned land in their provinces.

Parcels of abandoned land are not usually advertised by "For Sale" signs, although the local real estate agent may list them. The condition of the property, however, is almost always a reliable indication that it can be bought, and inquiry in the neighborhood will soon disclose the status of any acreage that appeals to you.

All too often an earthy character, chewing his cud as he leans against the fence, will tell you that "the county took the land for taxes." This means simply that the last owner deserted the property, and that because of his subsequent failure to pay the taxes on it title to the land has passed to the County Treasurer. Once a year the County Treasurer, in the official county newspaper, advertises a list of the properties held in this manner, and if the taxes are



not redeemed by the man who has failed to pay them, then the County Treasurer may sell the taxes to another bidder. With the taxes goes title to the land.

A good deal of abandoned land passes into new hands in just this way. The legal procedure, as well as the price to be paid, varies from county to county, so that if you intend to buy land "for taxes" you had best contact a lawyer in the local county seat. He is usually worth considerably more than his small fee. There may, for example, be 900 dollars in unpaid taxes on a piece of property, but your lawyer may be able to arrange a compromise whereby the county will give you title for a third less.

What you get, of course, is a tax deed. The validity of such a title again varies from county to county and according to the legal history of the individual property, but generally speaking it is the poorest of the three common types of deed. When the State buys abandoned land, the Attorney-General will not accept a tax deed, and few banks will lend money when such a deed is offered as security. The chief objection to a deed of this kind is that it can be contested from a variety of angles; its chief recommendations are that when abandoned land is involved contests of this sort are rare, and that the county is usually willing to sell at a favorable price in order to have the property returned to the active tax list.

There are two other types of deed—the quitclaim and the warranty—either of which is preferable to a tax title. In a quitclaim deed the seller relinquishes to the purchaser all his rights to, and interests in, the property. In a warranty deed he goes a step further—out on a limb, in fact; he personally guarantees that the purchaser is getting a clear and absolute title to the property. If you buy a tax title from the county, it is often possible to reinforce it by locating the most recent owner of the property and getting a quitclaim deed from him. Since this man has already let the property go for taxes, anything you pay him for the additional deed is likely to come as a pleasant surprise.

Unfortunately, deeds are not the only things that complicate the legal status of most of our abandoned land. In attempts to delay the process of going broke many an owner of such land took a pint of applejack in one hand and a mortgage in the other, and sold both to the first available sucker. Very few of the mortgages were ever paid off. They constitute a lien on the title, and if you want to sleep nights you would probably do well to buy them up. This may not be so difficult, as the chances are the mortgagee has long since despaired of being paid off and will sell you his interest at a tenth of what he paid for it.

So much for deed and mortgages—as clear a title, in other words, as you can get. Best leave the whole thing to your lawyer.

HOW much will the land itself cost you? That will depend on the land, its location, whether or not there is a house on it and what sort of shape it's in, et cetera. But it might be useful to point out that the State, which has bought more than half a million acres of abandoned land in the past 15 years, has paid an average of about $4.00 per acre for it. It seems likely that the individual could drive a sharper bargain, but for the sake of arriving at a total you could use the figure paid by the State.

Supposing, though, that you have to buy the Blackwell Place for taxes:

12 years' back taxes, total $1050... Settled for	$750.00
$900.00 mortgage...Settled for	100.00
Quitclaim deed from last owner	150.00
Lawyer's fee, recording fee, stamps	75.00
Miscellaneous (transportation, etc.)	50.00
Total	$1125.00

These figures, although they are based on an actual transaction in a certain county, are merely suggestive. Taxes depend on assessed valuations of both land and buildings, and an assessor in a Chemung township is likely to arrive at far different figures from those chalked up by an assessor in Schoharie County.

Furthermore, the Blackwell Place has a house on it. Buildings have a fatal attraction for assessors, who are inclined to place a value on them that will remain unchanged on the books no matter how the house weathers and crumbles down through the years. If land is what you want, and nothing else, then don't buy land with a house on it. You can buy abandoned land at from one to six dollars an acre, and pay yearly taxes on it ranging from 10 to 25 cents an acre. But if you buy a house along with the land, it's impossible to generalize about either the initial or subsequent expenses.

Nevertheless, the house as an adjunct to abandoned land is a vital part of this discussion, if only because so many parcels of land come so equipped. The fact of the house—built when and where there was a need for it, but still standing long after the need has passed—has had a decisive influence on the fate of our abandoned land and of the communities nearby. The house has held people on the land longer than the land could support them; it has drawn others back to the land who should have gone elsewhere.

Still, you will be tempted to fix up the Blackwell house. The first thing to do would be to put a new roof on it, so as to check the disintegration of the rest of the building until you have time to get around to more general repairs. Then you would point up the foundation and make sure the drainage system was functioning properly. Then you would check the timbers, shore up one or two of them where they had begun to sag, and replace two or three more. If the timbers were in really bad shape you would attend to them before you went to work on the roof.

But this whole business of fixing up the house is subject to one major consideration: are you starting off on a really sound, permanent undertaking? Is it desirable that you settle so far from the highway? There is a mile and a half of dirt road. If you live at the end of it the town will have to grade and ditch and surface that road in the summertime, and plow it in the winter. If you didn't live there, the town would probably abandon that road and spend the money somewhere else, where more people would benefit from it. The town will also have to get your children to school. The town plumber, carpenter, electrician, doctor—will have to spend a good deal of valuable time just getting back and forth to your place.

It takes a lot more than your taxes to justify permanent settlement of the Blackwell Place. One way to make up the difference is to use the land wisely and well—for a change.

When it comes to reclaiming the land there is no need to suggest that you go slow; you'll have to, but that doesn't mean that you should delay getting off to a good start. There are a number of factors in your favor:

First, the very fact that the land has been abandoned means that one by one various methods of exploiting the soil have been tried and found wanting, so that by now the possibilities of what can be done have been narrowed way down. The remaining possibilities have been subjected to extensive experimentation, and it has been found that the soil will best grow just what it was growing when our forefathers came along with their axes; it will grow trees. We badly need trees.

So you won't have to hunt around for a constructive program. Furthermore, there are men available to help you plan the details. The County Agent, representing the Federal Government's Extension Service, will come out and look over the property and tell you what he thinks can be done with it. Technicians from the Soil Conservation District will make what they call a soil and land use capability survey, and if things look right to them and you agree to go along, they will give you three thousand trees to plant—just as a starter. After that they'll match for free every thousand trees you buy, until you've got 22,000. They may even help you organize crews and equipment to plant them.

This Department will take a particular interest in your place. The Forest Practice Act was set up with just such places in mind. If you call him up your District Forester, who works hand in hand with the Federal Government's Farm Forester, will come out and cruise your land, map it out with you, and plan a long range program to put your woodlot and your fields back into shape. He will mark trees that should be cut and tell you where to sell them; he will tell you why red pine is better than white on your particular place, and how to order the red pine seedlings from our Bureau of Nurseries; and more. The expense to you is three cents for a stamp.

FOR the same investment you can get in touch with your District Game Manager. He may surprise you by telling you that abandoned land, left to its own devices, is not the ideal habitat for game that you had always supposed, but he will show you what to do about it; where cover is needed, where clearings should be maintained, where to break up your conifer plantations instead of planting a solid hillside; what shrubs to encourage; and again, more.

There are many other Department services available. In fact all the experience and information this Department has is at your disposal, as well as that of the State College of Agriculture at Cornell and the Federal Department of the Interior in Washington—to name only a few of the agencies interested.

But when it comes to doing the actual work of reclaiming the land, you will be pretty much on your own. Although the Boy Scouts and 4-H Clubs—and now and then a progressive sportsmen's club—do good work on the land, there is as yet no organized pool of either labor or equipment on which you can draw. That may come in time.

Also may come, in time, a dollars-and-cents return that will repay you for all you've put into the Blackwell Place. Could be. But there is another return you won't have to wait for. As you wander up Kronk Brook some fine spring day with a bundle of willow shoots under your arm, it may occur to you that there's more to erosion control than just keeping the soil where it belongs. Building up the land seems to make for a good life, and good citizens.

—P. W. FOSBURGH

Next Issue

In our April-May issue we will discuss the State's position with regard to abandoned land, and make some general observations about the importance of reclaiming one-sixth of the State.

WINTER DEER FEEDING

EVER since Christmas, reports of Department fieldmen have painted a picture of mounting snows and subnormal temperatures in the deer woods. A real "old-fashioned winter" is in progress. It is the sort of weather that makes one glad of a house and of a fire to sit before. But, as one dreams of the prospects for next fall's hunting, disturbing thoughts arise as to how the deer are faring under these conditions. Won't many winter-kill; and shouldn't the Conservation Department feed them?

In answer to the first question, if present conditions prevail until mid-February, mortality will rise sharply. If this weather should continue through March without a major "break", losses will be heavy. Deep snow and low temperatures came earlier than usual this winter, which threatens to be the worst for deer in several decades.

With respect to feeding, the Department already has a program under way. More of that later.

First, let's briefly review the case for such a program in New York.

Where is winter deer feeding necessary or desirable?

1. Primarily in the Adirondacks and limited portions of the Catskills.
2. In the Adirondacks there are some 300 yarding areas where winter mortality is chronic. The Department is now compiling weekly snow maps of danger areas.

Where is it possible?

1. Within the limits of the Adirondack and Catskill Forest Preserves the recommended method of feeding can be practiced only on private lands, with the owner's permission.
2. Elsewhere, State land can be managed too.

What methods are best?

1. The best method to use in areas lacking adequate feed is to cut scattered hardwoods which have grown out of reach of deer.
2. Although this will supply some browse at the time of cutting, the primary benefit will be the new growth of suckers and seedlings in subsequent years. Done on a rotation basis, a little being cut each year, a continuing food supply can be established.

How should cuttings be made?

1. They should be adjacent to good shelter (conifers) and preferably on south or east slopes.
2. A scattered pattern is better than clear cutting. It keeps the deer dispersed and active. Concentrated feeding is bad for the deer and bad for the range.
3. Saplings, not exceeding six inches in diameter, should be cut low on the stump and left where they fall.
4. When possible, work should be staggered at intervals throughout the period of deep snow.

What species should be cut?

1. Cuttings should be limited to hardwoods because those species are the primary browse producers.
2. Timber trees and conifers should be avoided.
3. Recommended species are soft maple, striped maple, yellow birch, basswood, choke cherry, shadbush.
4. Conifers should be encouraged and maintained for their shelter value, especially in lowland areas and on the lower adjacent slopes. In view of the many lumbering operations now going on and the low sizes marketable, it should be emphasized that a deficiency of shelter can be as important a limiting factor as lack of food.

What are the drawbacks of other methods commonly suggested?

1. Lopping of boughs or limbs, if practiced on an effective scale in problem situations, would soon exhaust the supply within reach of the manager's axe with no encouragement of new growth.
2. Effective use of artificial feed in areas where overbrowsing is already taking place would aggravate an already overcrowded situation and necessitate constant expansion of the feeding program to keep pace. For this reason the manufacture of molasses-soybean "cakes" has been discontinued.

What can the Department do?

1. The Department, through its Game Managers, Game Protectors and Forest Rangers, can carry on a program of cutting each winter in problem areas wherever possible. Within the Adirondack and Catskill parks this must be confined to private land.

As previously mentioned, the Department has already launched such a program this winter. This is being patterned after a successful trial last year based on information gathered by a Pittman-Robertson Project with C. W. Severinghaus as its leader. Game Protectors and Forest Rangers throughout the Adirondacks have been assigned to the job. Local help is enlisted to broaden the scope of operations. Attention is focussed on a total of more than 50 outstanding known problem areas. Others are serviced as time permits. Owners of private holdings are being urged to follow a similar plan. Preparations are also being made for work in the Catskills.

Nevertheless, there are also innumerable lesser areas which would be benefited by work of this kind. This affords an excellent opportunity for sportsmen to help themselves by organizing projects along the line outlined.

In conclusion it cannot be emphasized too strongly that, in the final analysis, as in other fields of game management, deer abundance must rest on the quality of the natural range.

—ROBERT W. DARROW

Yellow birch; hemlock cover at left

More about the SENECA TEST

IN THE last issue of the *Conservationist* a preliminary summary of the fox-pheasant study in Seneca, Yates and Ontario counties was presented. In view of the keen interest which has been aroused in this project, a further discussion is presented at this time—now that there has been more opportunity to analyze the results.

This study was initiated to learn more about how intensive fox control would affect pheasant survival and productivity. The first phase of the project, carried on during the late summer and early fall of 1947, involved the release of game farm pheasants on one area which was subjected to intensive trapping, and on another on which no special effort was made to remove foxes.

The Seneca County study area (hereafter called the trapped area) contains 88,650 acres which were subjected to trapping, but deduction of some 12,355 acres included in the Army Ordnance Depot and Sampson Naval Base and 1,994 acres in licensed game farms, left about 74,300 acres open to shooting and available for stocking. The Yates and Ontario counties check area (hereafter called the untrapped area) comprises about 71,000 acres. Posting of private lands was about equal at the start of the project, but posting during the last few days before the season opened removed more of the trapped than the untrapped area from hunting.

Efforts were made to estimate the relative fox abundance on the two areas at the time trapping began. A general survey of the terrain led most fox trappers to believe that the fox population on the untrapped area would exceed that of the other, but discussions with fox hunters and fur buyers suggested that actually in the winter of 1946-47 the fox density was greater on the trapped area. Probably well over 100 foxes were removed from each area last year. A summary of the opinions of those contacted, including many farmers, indicated that the fox population had dropped off slightly on the Seneca area but that on the Yates and Ontario area the numbers were as great, if not greater, than the year before. Attempts to appraise the actual fox abundance yielded estimates all the way from three to seven per square mile. All things considered, it seems probable that both areas supported densities that averaged between four and five per square mile in the summer of 1947. For the 88,650-acre trapped area a population of about 600 foxes when trapping began is, therefore, suggested.

From the beginning of trapping on August 7 until August 28 when pheasant releases were started, 124 foxes were removed. Another 63 foxes were taken by September 18 when the last of the pheasants was released, and 158 more foxes were caught by October 20, bringing the total removed to 345 by the opening of the hunting season. This total was made up as follows:

Red foxes totaled 170, of which 129 were adult (82 male, 47 female), 32 were immature (8 male, 24 female) and 9 were not determined as to age and sex.

Gray foxes totaled 153, of which 85 were adult (54 male, 31 female), 51 were immature (27 male, 24 female) and 17 were not determined as to age and sex.

A total of 22 cases occurred in which definite evidence indicated foxes were stolen from traps, but where the species and other facts were lacking.

The stomachs of most of these foxes were preserved for food habits analysis. This analysis, however, will not be available until a later date.

A STUDY of the distribution of foxes trapped indicated almost identical range for grays and reds, with immatures of both species often being taken in the same set. Less than 15 per cent of the foxes taken were caught on the central agricultural portion of the area occupied by the majority of the native pheasants and where the greater part of the stocking was done. Over 65 per cent of the foxes caught were trapped where the plateau slopes sharply to the lakes, with 175 being taken on the slope to Cayuga Lake. The latter represents seven per square mile for the area involved. As many of this group were juveniles, it is suggested that this well-drained eastern slope with its many woodlots attracted denning foxes. Somewhat less than 20 per cent of the take, or about four to the square mile, was from the Army Ordnance area. This was formerly good agricultural land but in the past six years has grown up to high grass, golden rod, some berries and shrubs. Populations of field mice were

high, and unharvested apples abundant.

The total take of 345 foxes on 88,650 acres was about two and a half per square mile. Thus by the time the hunting season opened over half the estimated fox population had been removed. At the time pheasant stocking was started on August 28 only one-fifth had been removed. However, most of the foxes taken from the main pheasant range of the trapped area were removed in the early trapping, so that the reduction there probably approached—and may have exceeded—75 per cent.

Some fox data were also obtained through the checking stations. On the Seneca area no foxes were shot, though 13 were reported seen by hunters. On the Ontario-Yates counties area 14 foxes were shot and 49 seen during the day-and-a-half pheasant season.

Pheasant releases were made at intervals from August 28 through September 18. Of the 10,756 banded pheasants released, 2,775 males and 2,621 females were placed on the study area and 2,888 males and 2,472 females on the check area. In addition to these releases about 450 unbanded cocks had been released on the trapped area prior to the start of the project. Observations, about four weeks after release, from a car and in the field with two dogs, showed that the released birds were tending to stay in rather compact flocks. Of the birds that were contacted at 17 of the release sites, 140 pheasants were observed, or 41 per cent of the stock released at these sites. Actual survival probably was somewhat higher. In this small sample no difference was observed between the trapped and the untrapped areas. Band returns to the extent of only about one per cent were received for pheasants found dead prior to the open season.

To determine the relative native pheasant abundance on the two areas, the farmer-co-operator inventory data from the spring and summer of 1947 were used and a supplementary survey was also run in the summer of 1947, using a new list of co-operators from the trapped and untrapped areas. These data are on a "per reporter" basis and cannot be converted into acreage, but may be used for comparative purposes. They indicate that the native population on the trapped area exceeded that of the untrapped by three to four times. Observations of native birds by field personnel on the two areas indicated roughly the same ratio and also that the total population was definitely low.

As described in the preceding issue, information regarding the number of pheasants taken and the degree of hunting success during the open season was recorded by questioning hunters at roadside checking stations on both areas. To appraise the relative intensity of hunting pressure, aerial observation of hunter distribution and density was used. Three flights were made over the areas, one on the afternoon of October 20 and one each on the morning and afternoon of October 21. The morning flight was made starting at the south end of the areas, while the two afternoon flights started at the north end. The data obtained indicated that 63.5 per cent of the hunters were on the trapped area and 36.5 per cent were on the untrapped area. All three flights showed that the hunters were most concentrated in the north of the areas.

SINCE the previous article was written, additional bands have been reported. Those received to date from other sources add 131 banded cocks to the trapped area group and 22 to the untrapped area, bringing the total returns to 514 or 18.5 per cent recovered for the trapped area, and 467 or 16.2 per cent for the untrapped area. Some question exists, however, as to whether all the birds represented by these additional bands were shot or whether some were found dead. In any case, the proportion recovered on the two areas was quite similar.

Because the above figures include band returns from all sources and all causes of death, and because the amount of hunting on the two areas during the open season was different, they cannot be compared directly for indication of relative survival of the released stock. For this purpose data from the checking stations (six on the trapped area and five on the untrapped area) where a complete record was kept of the hours of hunting effort for both successful and unsuccessful parties appear to afford a better index. (See Table 1.)

Data here indicates less effort was required in taking banded pheasants on the untrapped area than on the trapped area. However, three times the effort was required in taking unbanded birds on the untrapped area as on the trapped area—which is in keeping with the farmer inventory indications of relative population density.

These figures would seem to indicate that the number of banded birds available during the hunting season on the untrapped area was greater than that on the trapped area. The problem is complicated, however, by the fact that a higher total number of pheasants was present on the Seneca area because of the population of native birds. In view of the one bird bag limit, these birds, to some extent, must have served to divert some of the hunting pressure to which the released stock would otherwise have been subjected. This would tend to camouflage a possibly greater survival of banded stock on the trapped area. Considering the fact that the aggregate hours hunted on the Seneca area were double those on the untrapped area (Table 1) while the effort per pheasant (total) was about 20 per cent less, and assuming the nearly equal ratio of banded and unbanded birds taken on the trapped area represented the relative numbers in the total population, it is indicated that the number of banded birds during the hunting season was somewhat greater on the trapped area.

Nevertheless, the evidence of such a difference is not strong. Thus, in spite of a very intensive program of fox reduction on the Seneca area, no significantly greater survival among the released stock on that area could be demonstrated.

Finally it may be pointed out that band returns are indicative of relative survival only. Not all the birds present on an area are taken. Therefore, actual survival is something greater than the percentage of bands recovered, depending on the proportion taken by hunting and the extent to which recovered bands are reported.

Fox trapping was resumed immediately following the open pheasant season and will be continued until next fall. The scarcity of foxes which has been created on the Seneca area will thus be maintained throughout next spring and summer. Every effort will be exerted to obtain data regarding the effect of this control on over-winter survival, as well as on productivity during the coming breeding season.

—DIRCK BENSON, BEN BRADLEY

Table 1. Hours Expended by Hunters as a Whole on the Study and Check Areas in Taking Banded and Unbanded Pheasants.

Area Trapped	Date	Number of Hunters	Hours Hunted	Pheasants Bagged		Hours of Effort per Pheasant		
				Banded	Unbanded	Banded	Unbanded	Total
	Oct. 20	694	2288	176	167	13.0	13.7	6.7
	Oct. 21	1067	4934	193	218	25.6	22.6	12.0
Total		1761	7222	369	385	19.6	18.8	9.6
Untrapped	Oct. 20	551	1232	112	27	11.0	45.6	8.9
	Oct. 21	537	2125	109	34	19.5	62.5	14.9
Total		1088	3357	221	61	15.2	55.0	11.9

WILLOW: versatile plant

ANY DAY now we're going to have a good thaw. The snow is still two feet deep over the garden and the thermometer registered zero at 6:30 this morning, but just you wait and see. All the signs point to it: the horned owls have quite hootin' and hollerin' and have settled down to producing; the fox tracks no longer are laid down in pairs; and the cottontails are fighting every night (look at the patches of fur in the thickets.)

When that first real thaw *does* come to clear the snow from the fields and fill every stream brim-full, likely as not, Johnny on his way home from school will detour long enough to grab a fistful of pussy willow twigs to take home to Ma. Perhaps he will put a little too much faith in the branch that hangs over the stream, and fall in, thereby learning one of the characteristics of willows—brittleness.

It's an old custom, gathering willow twigs, so that we can watch the wooly-white catkins open up—one of the first real hints of spring. A close-up will show that these catkins are really dense clusters of flowers surrounded by and imbedded in a fine tomentum of white silky hairs. Sexes are separate, with staminate or male flowers on one plant, pistillate or female flowers on another. The flowers themselves are inconspicuous, without the large, showy petals we are accustomed to find in most plants, but the male catkins of certain willows are so bright a yellow that they are often planted in gardens for the early spring effect.

Plantsmen know the willows by the group or generic name of *Salix*, and the common pussy willow as *Salix discolor*. About 300 species are known, mostly from the cooler parts of the Northern Hemisphere. Some 22 species occur in New York State, ranging from the 40-foot black willow tree to alpine dwarfs a few inches long, found only on Marcy, MacIntyre and Whiteface. Their need for a copious supply of water usually restricts them to wet land.

A MARVEL of our times has been the chemical synthesis of root-inducing substances that have revolutionized plant propagation methods. The willows have been producing as good if not better substances of this kind for a long time, as anyone can demonstrate by leaving the pussy willow twigs in water for several weeks. The development of roots at and near the cut end is amazing.

This phenomenon has led to the widespread use of willows in the planting of stream banks to prevent or slow down erosion—from the lowly fishpole left sticking in the mud beside the brook, to the elaborate willow mats used to anchor the stream side of the Mississippi levees. Their liking and need for lots of water, ability to root without further help, rapid growth and quick recovery from injury make them almost invaluable for this purpose. Injure the bark of a willow below the water line and roots will promptly form above the scar. Tip over a willow and a thousand fingers reach out to hold on.

Soil binder and insect home

Willows have been and are being used to a considerable extent in the State for erosion control and stream improvement. The tree-forming willows are generally preferred for ease in handling, rapid growth, resistance to animal injury and permanency. Stream improvement by the C.C.C. utilized 8 to 10-foot dormant poles of the black willow to control bank slides and to reinforce and supplement bank deflectors and the stone cribbing of straight log dams. Holes were dug with a bar or shovel to get the butt end below the water level; merely ramming the pole into the ground by brute force would have stripped the bark from the butt.

A method used successfully to control sliding banks has been to dig shallow vertical trenches from the top of the bank to water level at regular intervals along the bank. Willow poles are then placed in the trenches, with the tops sticking above the top of the bank, after which the poles are covered lightly with soil. Sucker shoots and their own roots form all along the stems to hold the soil in place.

Since the root-inducing hormones are manufactured in the leaves and translocated to the stems where they can go about their business, the equation is simple: no leaves—no roots—no survival. Therefore protection from livestock, particularly horses or goats, is essential for several years. Nor will revegetation of idle beaver ponds with willows be easy, for willow seems to rank No. 3, just behind aspen and red maple, in old Pondslapper's diet. However, willows are worth trying almost anywhere as soil binders and as a source of immediate growth, quick shade and a summer-long home for insects right over the water.

—RALPH SMITH

OTTER: nature's playboy

At home, with a bass

FOR most wild animals the problem of existence is a serious one, and one which requires their constant attention. The otter, however, reserves considerable time for amusement. A sheer *joie de vivre* seems to best characterize its life, and it is this trait which makes it one of nature's most fascinating study subjects.

Properly, it is called *Lustra c. canadensis*, or literally, an otter of Canada, and it is represented throughout the United States and northward by eight subspecies or geographic races.

For those who have not had the pleasure of seeing this beautiful creature, the otter may be described as a large, streamlined weasel-like animal. Its weight as an adult is about 20 pounds, and it usually attains an over-all length of approximately 40 inches when fully mature. In general its color is a deep, rich, glossy brown, becoming paler and grayer below. The rich brown of its head grades on the lips, cheeks, chin and throat into a pale brownish gray. Its legs are short and powerful, with feet that are fully webbed. Its tail, a very characteristic feature, is long and tapered.

The history of the otter in New York State closely parallels that of the beaver. Both species were energetically sought by the early trappers and fur traders. Otter pelts, however, were not converted into "beaver" hats, but rather, they were used to adorn the great coats of prominent Europeans, the amount of otter fur trim on the coat suggesting the wearer's social position.

At the time European dignitaries were seeking otter furs from their American colonies, this species occurred throughout the State. The demand for their pelts continued to be so great, however, that the otter was exterminated in all parts of the State except the wilderness areas of the Catskill and Adirondack mountains. Here it survived all efforts to reduce its numbers, and in 1936 it was further aided by legislative action which closed the season. After nine years of complete protection, the population increase was so marked that the Department was justified in declaring limited open seasons in 1945 and 1946. At present it is extending its range into areas where it has been unknown for years.

This increase has been viewed with mixed emotions. Naturalists see in the population recovery the perpetuation of an extremely interesting species. Trappers have reached at least two conclusions. Some of them realize that this valuable fur bearer will mean more money for them. On the other hand, others feel the otter preys on and destroys more muskrats than he is worth, and moreover, drives out the beaver. The fishermen, and in particular those who fish for trout, visualize their favorite stretches of water furnishing board to a fisherman far more adept than themselves.

These incriminations are directed at the otter because of what he eats, but also because of what he takes and *doesn't* eat. As for his wholesale destruction of muskrats, there is little evidence that would indicate this predation is of serious consequence. Moreover, published records of direct observations of conflicts between otter and beaver suggest the otter is no match for his larger opponent. The fisherman, on the other hand, has more substantial evidence to support his contentions, even though the available evidence is of a limited nature. Work done in Michigan by Lagler and Ostenson on otter taken by trappers between March 20 and April 15 suggests that during this period they feed extensively on fish. Of the otter taken on trout streams, about 59 per cent of the stomach contents, by volume, was fish, but only about 23 per cent of the total volume was represented by game and pan fish. Those otter taken from non-trout waters (slow-moving streams inhabited by other types of game fish) seem to have preyed more heavily on game and pan species. The stomach contents of these indicate that about 65 per cent of the food, by volume, represented game and pan fish, while roughly 11 per cent was forage fish.

THE OTTER is not best known for his choice of food, however, but because he enjoys himself so thoroughly. This enjoyment is best exemplified by his desire to slide. In winter, he selects a high bank of snow and amuses himself for hours by sliding down, head foremost. In summer, he locates a high bank which terminates in deep water.

Regardless of where we place the otter in our affections, all must admit that no animal is more perfectly fitted for life. He is at home in the water, yet his overland travels are lengthy. The winter seems to add to the enjoyment of his wanderings as he swings over or through the snow with apparent ease. His natural enemies are few, and he is more than able to meet them in combat.

—ART COOK

A SAFE SPORT, BUT–Hunting continues to be one of the safest sports in the State. But it would be far safer if all hunters properly handled their guns.

The figures for 1947 show that there were 96 hunting accidents, of which 18 were fatal. The total number of accidents was eight less than last year although there were more hunters in the field than ever before, but fatalities were seven more than in 1946.

Six of the 18 deaths, and a total of 22 accidents, occurred while deer hunting; three rabbit hunters were killed and 15 injured; two woodchuck hunters killed, nine injured; two fox hunters died, 7 wounded; one pheasant hunter killed, four injured. Unclassified accidents claimed four lives and 14 injured, while three persons were wounded who were not hunting at all. Three were wounded during target practice, four while hunting squirrels, two hunting grouse, and one while out after frogs.

Hunters who got in line of fire suffered the heaviest casualties, with six killed and 21 injured. Five were killed as a result of tripping or falling with their guns, and five more were injured in the same way. Two men, (one of whom fell asleep while hunting woodchucks), were mistaken for game and killed, and six others similarly mistaken were wounded. Eighteen men guilty of careless gun-handling were injured, and one killed. Four hunters, one of whom is now dead, hunted with the safety off; another, also dead, used his gun as a club to drive game out of cover, while two more survived the same experiment. Two were killed, the cause unknown.

To continue: two hunters who failed to rest their guns securely, four who dropped their guns, one who was careless in crossing a fence, two who held their guns by the muzzle, one who carried a loaded gun in his car, and one who didn't know it was loaded–all wounded. Five hunters were wounded by riccochets and four by stray bullets.

DYING SPRUCE–Considerable numbers of those big old red spruce trees which conceal many a cottage, especially in the Adirondacks and in the Catskills, are on their way out. The nemesis hastening their departure is an insect with a tremendous name–*Dendroctonus piceaperda* (Hopkins) – the Eastern spruce bark beetle.

The outbreak of bark beetle has been in progress for 10 or more years in the Adirondacks and will probably continue so long as there is enough overmature spruce for the beetles to work on. The infestation was first noted in the Adirondack section in 1936, and study plots established in 1937 showed the per cent of overmature red spruce killed ranged from 10-15 to as high as 25-90. In previous outbreaks, the greatest mortality occurred in trees 160-200 years old.

The only cure seems to be to harvest the spruce before it becomes overmature, since there is as yet no practical means of controlling the beetle.

ALL IN A YEAR'S WORK–The job of being a Game Protector is everything it's cracked up to be, and for the men who patrol Lake George, at least, a whole lot more.

During the past year these Protectors found time (exclusive of their normal duties) to:

Save four persons from drowning.

Rescue 13 others from storm-swamped boats.

Play doctor to a boy who had cut an artery chopping wood.

Tow numerous stalled boats to gas docks.

Pick up a few tons of debris threatening navigation.

Assist in Department fish research on the lake.

Serve as an information bureau for visiting firemen.

In regular line of duty they arrested 115 persons for violations of the Conservation Law and brought charges for settlements amounting to $1,667.50.

LEADING THE WAY – Farmer-sportsmen relationship was given added impetus in Onondaga County when the eighteen clubs in the county Federation joined the Farm Bureau.

Many farmers are members of sportsmen's clubs and it is encouraging to see sportsmen reciprocating by joining the Farm Bureau. With Onondaga sportsmen leading the way, it is hoped that the idea will catch on.

GROUND HOG DAZE — Railroad commuters aren't the only folks who get scrambled up with their time-tables. It happens in the animal kingdom as well: early birds get caught in snowstorms, late ones in ice, et cetera.

Quite the goofiest performance in this respect was reported to us this past month by Bob Bush from his place in Cherry Plain, Rensselaer County, only it involved a woodchuck. On the morning of January 15, with the thermometer reading a breezy 8 above, our reporter glanced out his kitchen window and noted an odd-looking upheaval of snow in an otherwise unbroken expanse of white a few rods from the house.

Figuring maybe he had fallen heir to a meteorite or a flying saucer, BB waded knee-deep into the field for a better look.

What he found was a woodchuck hole, the befuddled tenant of which had awakened from his winter's sleep two months too soon and poked his head up through 18 inches of snow, expecting maybe to find his clover in bloom. Noting his mistake, the 'chuck nonetheless figured he would leave things neat appearing, so he cleaned out the entire entrance before going back to bed.

To those who would argue that the job had been done by a rabbit or a fox, be advised that there just weren't no such tracks to be seen.

RUNAWAY PHEASANT — The pheasant isn't a migratory bird but there is one, at least, reared last year by the Conservation Department, which had its own ideas about travel.

This particular bird, banded No. 6215 at the Brownville Game Farm, was released at 12 weeks of age by the Fin, Feather & Fur Club of Niagara Falls in the vicinity of that city. Along last October Mr. Stanley Dryja of Niagara Falls went up to Port Weller, Ontario, for a little hunting and came back with the traitorous bird after it had taken a run-out powder on the good old USA and traveled 10 miles into "alien" territory.

Mr. Dryja surmises that the bird was headed for Canada's wheat belt when its tour was interrupted by a load of chilled 6's from his shotgun.

DEPARTMENT? or COMMISSION?

A Summary of a Committee Report to the State Conservation Council

WHAT are the advantages and disadvantages of the commission form of administration of fish and game resources? Would a change from department to commission be benficial to conservation in New York? These were questions put to a committee of the State Conservation Council which was instructed to present its findings and recommendations at the 1947 convention at Rochester.

In the steps taken to initiate this study and in the recommendations arising from it, no criticism of the present administrators or of the quality of their performance within their present powers was implied.

Although an increasing number of states are turning to the commission type of administration, it was soon discovered that imperfect laws or inefficient administration are as possible under this type as under any other system. It was also found that states having the finest forms of commission control are beset with as much—if not more—dissension among sportsmen as is our State under its department set-up.

Having in mind the fact that no type of fish and game administration is fool or tamper-proof, the Committee made this important observation: "The most necessary and beneficial help a State's program can have is an alive, informed and progressive, well-organized sportsman and conservation group working closely with state conservation officials."

The Committee found that one critical limitation in our current form of administration is that certain powers are withheld from it which are ordinarily given to commission forms: Wildlife management is a science embracing variable factors, and regulations affecting the taking of game should depend directly upon the objectives of management, as recommended by wildlife technicians. Therefore, regulation of fish and game by legislative action has become obsolete, since it is obviously impractical to expect the Legislature to have an intimate familiarity with wildlife problems or to give them more than superficial consideration when they are faced with the many other problems of State.

It was further found that these regulatory powers, in the hands of no matter what type of administration, can be ineffective unless fish and game programs are supported by authority to regulate permit fees in line with changing economic conditions.

How does our Department compare with the commission form in administrative stability, particularly with regard to long range programs? Our Commissioner is subject to removal on purely partisan lines, since his term of office is concurrent with that of the Governor who appoints him. However, the Division of Fish and Game, from its Director down, is on a civil service status. To compare with New York, any commission form obviously must have civil service status for its technicians from the Director down.

IT HAS been suggested that a fish and game administration achieves stability through the uninterrupted continuance of a civil service staff, despite partisan administrative changes. This is true of the technical work but the Committee pointed out that the policy and quality of the top leadership are vital determining factors in efficient organization and long range policy, and that personnel morale is closely associated with those factors. An important advantage of the present set-up is that it supplies a Commissioner at State cabinet level to co-ordinate the work of the various divisions of the Conservation Department with related programs of other State Departments.

Under the commission form, the Commissioners are appointed with staggered terms which overlap any one Governor, thus tending to limit political influence. However, the very fact that there are several Commissioners removes the possibility of fixing responsibility on any single person. But the Committee reported that under the commission form the most serious hazard is the divorce of fish and game from forestry, and other related services.

AS A RESULT of their research, the Committee concluded that—in view of the increasing necessity for co-operation and pooling of assets and efforts by the interests comprising fish and game, forestry, agriculture, land, water, parks, highways and public health—conservation could best be served in at least the immediate future by continuation of our present department set-up. Certain recommendations were made, however, which would tend to combine the advantages of the commission form with those of our present form. They include.

1. The transfer to the Department of regulatory powers covering seasons, bag limits and manner of take, as well as the authority to set license and permit fees.

2. The transfer to the Department of budgetary control of the Conservation Fund, subject to audit of the State Comptroller, and the fixing of a six-year term for the Conservation Commissioner.

3. Enactment of a law to require the appointment by the Commissioner of an advisory board drawn from informed sportsmen and conservationists. This would make permanent a policy now in effect only at the pleasure of the Commissioner.

4. Finally, the Committee recommended that the State Conservation Council undertake to write a model commission law for fish and game administration in the State of New York, to be held ready for such time as conditions may warrant its application.

—MICHAEL PETRUSKA
Secretary of the Council Committee

Out of the Past

A Bit of Department (or Commission) History

The State's natural resources relating to forest, fish and game in the past 63 years have been under 20 so-called administrations. These have had five different designations and two different forms.

During the first two administrations—1885-1893 and 1893-1895—it was the Forest Commission. The Forest Commission was combined with the Fisheries Commission and the name changed to Fisheries, Game and Forest Commission in 1895. In 1900 the set-up was known as the Forest, Fish and Game Commission and continued as such until 1911, when the Conservation Law was recodified and the Conservation Commission came into being. That title and form remained in effect until 1931, when the Conservation Department was organized under a departmental plan adopted for all branches of State service. This form has held through to the present.

Before 1903 and in the period 1911-14, there were sometimes three and sometimes five commissioners, and after that, one.

DEPARTMENT ACTIVITIES

THE DEER TAKE—The 1947 deer season was a red letter one in many ways. A total of 17,322 deer was taken—an all-time State record and an increase of 10 per cent over 1946. Special deer licenses sold established a second all-time mark with 286,936, also up 10 per cent over last year. Surprising as was the total kill—an even greater take had been anticipated—the season had to contend with a 10-day setback in the Adirondacks because of the closing of the woods.

The Southern Tier reported the greatest kill, with 6,462 bucks; the Adirondacks came next with 6,094, up 1,197 over 1946; and the Catskills reported 4,787, an increase of 427 over the previous year. Hamilton County, in a comeback, led all others with a total of 1,128 deer taken. St. Lawrence with 1,112 was second; and Sullivan, leader in 1946, dropped to third with 956. Allegany County with 816 topped the Southern Tier.

On the basis of reports one hunter in 16 got a buck, and estimating an average of 130 pounds to a dressed deer, 1,200 tons of venison went into the lockers. Data collected at the Department's deer checking stations regarding the age of deer in the three regions compared closely with that of last year for the Adirondacks and Catskills, but in the Southern Tier the proportion of yearlings taken was significantly higher.

In the Adirondacks 65 of the 415 deer checked were more than 3½ years old, with several in the classes from 7½ to 9½ years. In the southern part of the State, out of a total 351 deer checked the only ones over 3½ years old were nine 4½-year-olds and two 5½-year-olds. Of interest is the fact that deer from the Adirondacks this past fall were noticeably heavier than for the past several years.

SPECIAL PROTECTORS—It's report card time now for several Columbia County sportsmen who went to school—just prior to the hunting season—to be educated in the intricacies of law enforcement. They have been serving as Special Game Protectors.

Because of incidents that aroused property owners to a point where they threatened complete posting, particularly in the Austerlitz Mountain area of the county, local sportsmen appealed to this Department for assistance. The incidents, which included outright violations, reckless gun-handling, and disregard of property rights, were serious in themselves, but the sportsmen were particularly concerned by the deterioration of landowner-sportsman relationships which inevitably resulted.

In response to the sportsmen's appeal, this Department agreed to qualify a small number of men as Special Protectors. The men were chosen from the membership of clubs belonging to the Columbia County Federation of Sportsmen, and after completing a course of instruction held by the Department, they have been operating openly in their own bailiwick.

The Special Protectors could not, of course, be expected to lessen the hunting pressure to which Columbia County is annually subjected. But it is believed by the County Federation that their work in the field stimulated better sportsmanship. Preliminary reports showed them most active in the field, and their presence had a worthwhile preventive value—one of the important phases of law enforcement.

BACK ISSUES—A great many of the *Conservationist*'s subscribers have written in recently requesting information about back issues of the magazine, their price, and how to obtain them. Here's the dope:

Back issues still available are December '46-January '47; February-March, April-May, August-September, October-November, all 1947.

These are priced at 20 cents per copy and can be obtained by writing the *Conservationist*, N. Y. S. Conservation Dep't., Albany 7, N. Y. Send check, cash or money order, but NO stamps. No additional remittance for postage is necessary.

SALVAGE—Three fish salvage crews, operating under the direction of the Department's Bureau of Inland Fisheries, last year netted 27 waters, took from them 224,115 pounds of fish, and with the more desirable elements of their catch stocked 92 different ponds and streams. The purpose behind all this activity was to improve sport fishing—either by transferring fish from poor to favorable habitat, or by eliminating coarse fish from waters that would support better species.

The total take for 1947 (more than triple that of any previous year) is shown below:

Species	Pounds	Value Per Lb.	Total Value
Largemouth Bass	2,459	$2.00	$ 4,918.00
Smallmouth Bass	439	2.00	878.00
Yellow Perch	19,561	.15	2,934.15
Bullhead Catfish	71,288	.20	14,257.60
Pickerel	1,934	.25	473.50
Sunfish	1,272	.10	127.20
Pike Perch	6,213	.45	2,795.85
Calico Bass	8,567	.20	1,713.40
Great Northern Pike	242	.25	60.50
Brown Trout	39	1.00	39.00
Rainbow Trout	5	1.00	5.00
Brook Trout	93	1.00	93.00
Lake Trout	296	1.00	296.00
Blue Gill Sunfish	105	.10	10.50
Rock Bass	32	.10	3.20
Carp	109,054*		1,256.74
Suckers	2,516		
Totals	224,115		$29,861.64

* 49,593 pounds of carp sold for $1,256.74.

TREE ORDERS—Up to the present time, a total of over 700 applications for 2,600,000 trees—to be planted on privately-owned lands—has been received by the Bureau of Nurseries. This is an increase in the demand for trees as compared with last year.

There are at present substantial quantities of white pine, red pine and white cedar seedlings available for use on private land reforesting projects. White pine and cedar are three-year olds; red pine, two. All persons interested in securing trees for the spring planting season should send their requests to the Albany office without delay, inasmuch as the normal demand for trees for the next month will be very heavy and it is a policy of the Department to fill the requests in the order of their receipt. It is expected that the total of 6,000,000 trees ready for distribution this spring will have been taken up on orders by the time the first shipments of trees are made from the Saratoga and Lowville nurseries about April 15.

PLUG—Members of the Wild Life League of Albany, looking at the matter of conservation education with long-range glasses, have made the *Conservationist* available to students in 10 Albany schools and colleges.

FISH STOCKING—A number of inquiries have been received lately as to the basis of this Department's fish stocking policy. As the hatchery trucks will soon start making the rounds, we will attempt a brief outline of what happens to our hatchery output, and why.

In 1926, a study program of the waters of New York was outlined and put into operation. The drainage areas of the State were divided into 14 watersheds, one of which was studied each year until the entire project was completed in the summer of 1939. Physical, chemical and biological information was collected on the individual bodies of water so that a definite and uniform stocking policy could be formulated for each—provided that the data collected during the studies indicated that the stocking of fish would produce better fishing. In the case of trout, where stocking was needed definite numbers and sizes were specified.

These studies and the recommendations resulting from them now serve as a basis for the Department's fish planting program. Distribution forms for individual waters, calling for a particular species and size of fish, are made out annually in the Albany office. In order to simplify the distribution of the fish as they are made available at the hatcheries, these forms are grouped by counties, and so filed.

The number of fish allotted to a particular water depends on the total recommended compared to the total actually available in each size group. For example, the recommended stocking policy for yearling brown trout is approximately 1,600,000 for the whole State. If the total hatchery production of yearling brown trout is 800,000, then only 50 per cent of the recommended number will be stocked in each water.

When it comes to actual distribution of fish, this is accomplished through the co-operation of local sportsmen's groups in each county. Those groups which are affiliated with the County Federation are preferred because of their closer liaison with the Department.

Incidentally, fish for stocking purposes may also be obtained from the Federal Government—from the Fish and Wildlife Service, Department of the Interior, Washington, D. C. Requests for application blanks may be sent to that address (one application for each body of water to be stocked). When these applications have been properly completed and returned to Washington, they are submitted to this Department for approval and study, so that our stocking policy will not be disrupted. Federal applications filed during the current calendar year will be acted upon during the course of the ensuing year.

FOREST FIRES—The final report on forest fires, October 11-31, presents a little different picture from that given in our December-January article on Fire. The recapitulation gives 494 fires which burned 17,537 acres, or an average per fire of 35.2 acres. Estimated damage to standing timber is $88,427 and to buildings and improvements, $1,000. The amended figures show 23 more fires than originally reported, but 2,227 fewer acres burned. The complete reports also cut the estimated damage by $35,378.

Forest Rangers put out 82 per cent of all fires before they reached a size of 10 acres each, and 14 per cent were held to 100 acres or less. Nineteen fires, or four per cent of the total, accounted for burning 14,436 acres.

Special mention should be made of the "Plains" fire in a remote section of wilderness south of Inlet. The smoke was spotted by three fire towers and men and equipment were rushed to the area by Department planes, marking the first time in the history of the State that fire fighting equipment was dropped from a plane to a fireline. As a result, the fire was confined to a 3-acre area and was quickly extinguished.

DO YOU KNOW YOUR LAWS?

Ownership of Fish and Game

Ownership and title to all fish, game and quadrupeds, except those legally acquired and held by private ownership, is vested in the State. (You don't own the grouse in your woodlot nor the trout in your stream.) Persons who take such fish and wildlife consent that title shall remain in the State for the purpose of regulating and controlling its use and disposition. (You can't take that pheasant whenever you please, nor can you take as many trout as you want.)

In effect, that is Section 150 of the Conservation Law. On this premise are based the general powers and duties of the Conservation Department. On this cornerstone is built the whole structure of conservation in this State.

Constitutionality of this assumption has been upheld. It has been tested from all angles, and decisions of the courts have favored the commonwealth at every turn. Simply, the power to preserve fish and game has been construed inherent in the sovereignty of the State.

CROOKED TREES—Much of the red pine planted as ornamentals and in plantations in Dutchess, Putnam, Westchester and Nassau counties has suffered considerable damage in the past 20 years from attack by the European pine shoot moth. In plantations, many trees have a very pronounced crook in the butt log as the result of shoot moth injury to the leader when the tree was young.

Red pine planted as ornamentals are often stunted or badly deformed by repeated attacks of the shoot moth. The soil in these counties does not seem to be suited to red pine, and the winter temperatures are not consistently low enough to have any noticeable controlling effect on the moth larvae.

ON THE AIR—Arthur S. Hopkins, Assistant Director of the Department's Division of Lands and Forests, spoke over Schenectady's station WGY on January 19 and discussed the question: "Does Public Forestry Pay?"

Mr. Hopkins will be followed on the air by other Department men in the near future. On March 15 R. M. Hick, District Forester at Oneonta, will comment on the Forest Practice Act; Kinne Williams, Superintendent of the Bureau of Forest Fire Control, will inform the public on April 26 that "The Forest Fire Season Has Begun". And A. T. Shorey, Campsite Inspector, will take his listeners "Camping Out in the Forest Preserve" on June 21.

All of the broadcasts are scheduled to begin at 12:40 p.m.

WOODS SAFETY—The Department has recently issued a small pamphlet with a big wallop. It should be of interest to anyone who works in the woods.

The pamphlet points out that such work is a man-sized job, which, if improperly handled, can be extremely hazardous; in fact the lumbering industry has the highest accident rate of any in the State. The booklet—mainly a series of suggestions as to how to make logging safer—takes only a few minutes to read and is available upon request.

PAYING OFF—State forests, outside the Adirondack and Catskill parks, are beginning to pay off as an investment. An outstanding example is an area of 20 acres astride the Steuben-Schuyler counties border. A net income of $970.09, or $48.50 an acre, was realized on sale of Christmas trees during 1943, '45 and '47.

The state forests were formerly known as reforestation areas. The acreage mentioned is in Forest District No. 4 and is part of the state forest known as Steuben-Schuyler No. 1.

Letters to the Editor

WRITE SOO
Your editors, in one respect at least, are just like other people they like to get mail.
Th also feel tha this is your gaz , it is fair to provid ou th space to what you th -ac it e, comment, or inquire. Such letters as are of general interest will be pu ished just as they com in— as wo n fi ro to pr
U.S.
MAIL
Editor of the Conservationist, Conservation Department, Albany 7, New York.

POSTING

Dear Sirs: For some time I have been wondering where I could get information about the posting of land and with my first issue of the *Conservationist* my quest is ended.

What are the rules and regulations for posting property? How far apart or rather, how close must the notices be posted? Must the owner's name be on the notice? In the case of a sportsmen's or gun club's posting property, is just the name of the club sufficient or must a representative's name be included? If a boundary line is too sparsely posted can the land be hunted?

I hope you answer letters by mail and not in the Letters to the Editor only as I am rather anxious to find out about this matter.

George E. Washburn, Monsey

• *Complete information on posting land is found in the booklet on Conservation Law, priced at 25 cents. However, to save you time and money we can say briefly: Signs must be not further than 40 rods apart; the owner's name and address must appear on the notice; property posted by a club must have the club's name and address on the sign; if a boundary line is too sparsely posted it's not legally posted according to the Conservation Law, and therefore could be hunted.—Editor*

DISGUSTED

Dear Editor: Under Scatter Shots in your last edition, I read with disgust two articles on foxes, one by Leo A. Wincowski who advocates a bounty on foxes even though this has been tried and found unsuccessful in several states. He prides himself on being well informed on the Cayuga and Seneca lakes test, and knows why it is being done. Could he gaze into his crystal ball and give us the results?

Another letter, signed "A Fox Hunter" and distributed by professional fox trappers: they state that small game clubs are sponsoring a drive to destroy our foxes, and in return they advocate destroying grouse, pheasant and rabbits the year around. I would personally like to meet some of these socalled professional trappers or hunters up in my section destroying game the year around, as whoever would pen a note like that I class as vermin, and would act accordingly.

Harry Arnold, Pres.,
Cambridge Fish & Game Club

• *The letters which Mr. Arnold refers to were published, without comment, in our October-November issue. Still no comment.—Editor*

OLD SAM'L CHAMPLAIN

Dear Editor: My main purpose in writing this is to rise to the defense of old Sam'l Champlain, who had all the makings of a real woodsman, an excellent map-maker, and an accomplished story-teller. Bob Bush to the contrary (October-November *Conservationist*), he did make quite a to-do in his second book of travels about the beauty of Lake Champlain, its islands, its trees and its mountains, and as for fish, listen to this from the report of his 1609 voyage:

"There is also a great abundance of fish, of many varieties: among others, one called by the savages of the country *Chaousarou*, which varies in length, the largest being, as the people told me, eight or ten feet long. I saw some five feet long, which were as large as my thigh . . . The extremity of its snout is like that of a swine. This fish makes war upon all others in the lakes and rivers. It also possesses remarkable dexterity, as these people informed me, which is exhibited in the following manner: When it wants to capture birds, it swims in among the rushes or reeds, where it puts its snout out of water and keeps perfectly still; so that, when the birds come and light on its snout, supposing it to be only the stump of a tree, it adroitly closes it, which it had kept ajar, and pulls the birds by the feet down under water. The savages gave me the head of one of them, of which they make great account, saying that, when they have the headache, they bleed themselves with the teeth of this fish on the spot where they suffer pain, when it suddenly passes away."

This, for my money, is the first Adirondack fish story.

P. Schuyler Miller, Schenectady

• *I still contend that Samuel was only casually interested in the lake's fish—the proof of the pudding being that he picked out the rascally gar-pike as a subject for his observation.—Bob Bush*

POEM SUBMITTED

The conservation of otters should be foremost
in our minds
For they are so jolly and very kind
They romp through lakes and streams
To extinguish them is a crime, it seems.

II

Otters are frisky they are a show in themselves
They remind you of mischievous elves
Hunters shoot them left and right
Against this we should put up a fight.

III

Let's pass a law to preserve their life
Anyone caught killing them should get one
year to five
Some people are thoughtless and don't give
a care.

A MAN FROM MAINE

Dear Sir: I spent all of my vacation last summer in your New York State camps. As "a disinterested outsider" I can say that everything was perfect and everyone I met at all the parks was very kind and did everything they could to make my vacation pleasant. The things campers look for were all good: water, toilet accommodations, dry camp sites and clean. . . . I met caretakers at all the camps and in each case they were very pleasant and ready to give service. There is no criticism I can think of to offer and I hope I'm given the privilege to use your camps again.

I am 66 years old and have been out-of-doors all my life. I have camped out ever since I started school. During the summer of 1946 I camped out every night from July 22 through October 7, in 25 states and Canada . . . so I think I know a little about camping and what it takes to make a good campsite. You have it.

Write me if there is anything I can do to help the cause, and save me a place at Fish Creek Pond for next summer.

George P. Longfellow, Brunswick, Maine

PISTOL PERMIT

Dear Sir: Any information regarding the process to obtain a pistol permit would be greatly appreciated. I am especially interested in the following details: 1. Where to apply. 2. The age requirements. 3. The type of permit to apply for sportsmen.

In relation to this last detail, my friends lead me to understand that there is no special permit for sportsmen, and I must obtain one to carry a pistol concealed. However, this seems rather unreasonable since I wish to carry one only when hunting or when target shooting.

H. P. Bernhard, Albany

• *Section 1897 of the Penal Law applies, since a pistol, regardless of how carried or for what purpose used, is regarded as a concealed weapon. In your instance (1) application should be made to a court of record; (2) you must be over 16; (3) your friends are right: there is no special type of permit for sportsmen. We assume, of course, you are a citizen.—Editor*

TO BE A RANGER

Dear Editor: I read with great interest the story "Forest Ranger" (October-November issue), and I wondered how a person may become a Forest Ranger or get an associated job. I am a junior in high school and am majoring in agriculture and science.

Norman West, Nineveh

• *Job specifications and qualifications are available through our Personnel Office. A copy has been forwarded.—Editor*

BLOODHOUNDS

Dear Editor: I would appreciate it very much if you could furnish me with any information on bloodhounds. Does anyone in New York raise them? Do our State Police have any?

W. F. Delaney, Hornell

• *If you're in the market for bloodhounds, your best bet would be to look in the advertising section of the magazine "Dog World". Troop K of our State Police keeps a pack of them in Hawthorne, but they get them from a kennel in Orange, Conn.—Editor*

OUCH!

Gentlemen: With the latest issue of the *Conservationist*, I received a subscription renewal blank. . . . Here's my buck. It's not too deer, but I'd like to get my doe's worth.

Bob Hughes, Hopewell Junction

FARM POND

Dear Editor: Do you have any literature on fishponds? A friend and I are planning to build one about two acres in size, and from 10 to 12 feet deep. There has always been a pond here, spring fed. The bottom of the old pond is mud and clay and should make a good dam. The water has been so shallow for the past 10 years that it has been freezing to the bottom every year, so there are no fish in it now.

Can you put smallmouth bass and trout in the same pond, and if not, what would you put in with either one or the other for them to feed on? What about fertilizer—how much, and how often—or isn't that what you should use to stimulate some kind of plant growth in the pond?

As regards the dam, we're swinging a stone wall around for the bottom of the dam, with a bulldozer, and building it up to the proper height with the dirt from around the pond and covering it with clay, rolling it with a four-ton bulldozer, and making an overflow of concrete. We have a four-inch pipe through the bottom of the dam, with a petcock on the outside, in case we ever want to drain or lower the pond.

Curt Hulse, Goshen

● *There has been a tremendous amount of literature on farm fishponds in the past few years. In most cases, the Soil Conservation Service as well as the Fish and Wildlife Service have recommended an association of largemouth bass and bluegills for stocking. This particular association is not well adapted to the northern part of the U. S., and it is suggested that you manage your pond either for trout or for bass, depending on the temperatures.*

You state that this pond is spring fed, but if it freezes to the bottom each winter, it is more likely fed by seepage. In any case, if, after you have constructed the new dam, the temperature on the bottom does not run higher than 68 degrees during the summer months, your pond would be suitable for trout, brook trout probably being the best choice. If temperatures run much higher than this, it would be best to manage the pond for largemouth bass, or—if the bottom is gravel—smallmouth bass. We do not recommend the stocking of minnows for food. Game fish can feed on aquatic larvae and also perhaps on crayfish which will find their way into the new pond.

A two-acre pond cannot be expected to yield unlimited quantities of fish, either bass or trout. A pond of that size should be able to produce about 100 pounds of fish each year, half of which would be of legal size.—O. R. Kingsbury

A BORED "HO-HUM"

Gentlemen: I note that our old friend Deac Miller (Sparse Grey Hackle) has donned his hairshirt again (page 32, Aug.-Sept. issue) and gone off the deep end. He now claims to be the worst fisherman in the State. Phooey.

He also says that he is proud of his ignorance in matters piscatorial. Phooey again. I have a file of correspondence with him extending back almost 10 years . . . and there is enough angling lore in that file to make two fat books. . . . The truth is that he is loaded to the eyebrows with facts, fancies and experiences on every conceivable phase of angling, past and present. When he utters an unconvincing disclaimer such as appeared over his nom-de-plume in your magazine, the proper rejoinder is a bored ho-hum, accompanied by a wide yawn.

Dan Brenan, Fayetteville

GARBAGE AND 'COON DISPOSAL

Gentlemen: Several times this past fall while taking motor trips my family and I have stopped at closed roadside stands to eat lunch. There are nearly always a couple of steel drums with the top cut out for refuse containers. Why can't the owners tip these bottom-side-up when they leave, or at least on their sides, so that wild animals don't get caught in them. The steel sides are a rough deal for most climbing animals.

The last 'coon we liberated was at the Arden Farms Milk Bar on the east side of the highway. His fingernails were well filed.

William Roberts, Booneville

● *And in the summer, uncovered cans breed flies and mosquitoes.—Editor*

2nd BULLSEYE

Dear Sir: I read with interest your letter entitled "Bullseye" (October-November *Conservationist*), and as a result we are enclosing a money order for two dollars, for which kindly send the *Conservationist* to the Bullville Grade School, Bullville, N. Y., and the Circleville Grade School, Circleville.

Thomas J. Henderson, Sec.
Bullville Rod & Gun Club

BOUNTY ON CATS?

Dear Editor: Regarding your recent article on the Bounty System (August-September *Conservationist*), would like you to put me down as being in favor of a bounty on gray fox and wild house cats. These so-called domestic cats can be seen by the dozen any night on any country road, and brother, they are not merely out for a constitutional.

C. A. Wambold, Elmira

COOK THAT CROW

Gentlemen: This is the way to cook a crow: First, clean them inside and out. Then wash them good and make sure there is nothing adhering to the insides. Then stuff them, sew them up, put into a pan, pour boiling water over them until they shrink up. (That can be noted by seeing the legs draw up.) Pour off the boiling water, put strips of either salt pork, bacon or leaf lard over the breasts of the crows, then put your favorite soup or tomato juice or clear broth into the pan in which you intend to roast them, put into slow oven and roast covered for three hours, when the fat begins to show signs of browning.

Then turn the crows over so their breasts are upside down. Then turn every half hour until the last half hour before through. Uncover and let them brown. Use well-seasoned tomato juice for the gravy and it flavors them well.

Mrs. Alma Hoey, Brooklyn

● *A second letter from Mrs. Hoey points out that crows over 1 lb. in weight are likely to be tough, in which case they should be steamed before undertaking the operation outlined above. There used to be a man in Middletown who supplied Mrs. Hoey with crows—dressed, drawn, and shipped on ice—but this source has now failed and her letter ends with a plea for a new provider.—Editor*

FOREST PRACTICE ACT

Dear Editor: In the August-September issue of the *Conservationist* I note your "Reports from District Foresters", having reference to the Forest Preservation Act. I am the owner of 300 acres of land, now being used as a hunting preserve, and I would therefore like to know something of the details of this act, its scope, and how the same would apply to me.

Charles Schlesinger, New York City

● *The Forest Practice Act is designed to enable this Department to assist private landowners in the management of their forest lands. As the field work under this act is carried on through our District Foresters in various parts of the State, it would be necessary for us to know where your property is located, so that your inquiry could be referred to the proper man.—Editor*

BIG, BUT NO PUNKIE

Dear Editor: My attention has been called to an article on sunfish and bluegills in one of your recent numbers, in which I believe it was stated that these fish never grow to weigh as much as a pound. Last summer, fishing in Pleasant Lake near Gouverneur, N. Y., I caught a bluegill weighing one and one-half pounds. It was 12 inches long and beautifully colored. Oddly enough, it struck on a flatfish plug and fought just like a pike, going three times for the bottom.

I took it to Brasie Corners where it was weighed by one of the officials of the Black Lake Fish and Game Club, who kept it on exhibition for a few days. I am curious to know if it really was an unusual fish, and if it is possible to estimate its age. Would you be able to tell me?

Mrs. Marie L. Cooper, New York City

● *The article you refer to, which appeared in the June-July* Conservationist, *discussed only the common sunfish, or pumpkinseed, and remarks about weight pertained only to that species. Authorities seem to agree that this punkie never gets to weigh more than a pound.*

The bluegill is different. Specimens have been recorded up to a pound and one-half, but such fish are extremely rare, especially in New York and other northern states. You caught a very unusual bluegill, probably about six years old.—Editor

PHEASANTS IN TREES?

Dear Sir: Has there ever been any explanation why pheasants roost on the ground in this country, and yet roost in trees in England. I have talked to a number of former English game keepers but they have no explanation, and yet in reading old English books I find they speak of the poacher choosing a moonlight night, with some wind, and white clouds, to better see the pheasants in the trees, and the wind to deaden the report of the loads used.

If our pheasants roosted in trees, it certainly would eliminate to a great extent the fox menace except when the spring nesting season was on.

George D. Canfield, Peekskill

● *Our pheasants were originally imported from England, so that there is no difference in the breed. We also suspect that there is no real difference in roosting habits. It is not unusual to see pheasants roosting in trees in this country, although both here and in England they spend about 90 per cent of their time on the ground. Possibly the writers you mention were calling attention to unusual, rather than usual, circumstances. It is also reported that English poachers often used dogs to flush the birds into trees at night.—Editor*

CANNED VENISON

Gentlemen: Reading through the deer laws published in the October-November *Conservationist* (Do You Know Your Laws), I didn't find what I wanted. I would like some information about deer meat. Visiting a friend upstate I was asked how long you can keep venison in jars. Is there a period of time specified for that, or can you keep it from season to season and still be within the law?

N. Cassaro, Brooklyn

● *Venison, in jars or in any other form, may be kept until July 1, 1948, unless the Legislature this year further extends the time limit.—Editor*

PHOTO CREDITS

First cover, A. F. Tait; second cover, Pierson Studio; page 8, W. S. Carpenter; 10, Doug Finch; 14, John Schemp; 21, P. W. Fosburgh; 22, Doug Finch, Earl McGuirk; 24 Dave Cook; 25, Clayt Seagears; fourth cover, Ellen Edmonson.

Missing New Yorkers

Every time a calf disappears, the boys start looking for lion spoor. We used to have lions (mountain, not shaggy) but they're all gone now. We had some other beasts, too—

ONCE upon the New York State mountains there used to be buffalo, moose, elk, panthers, wolves, wolverenes and a lot of lynx. The buffalo called it a day about 200 years ago. But all the rest disappeared within the last century.

Any day now a lynx or two actually may turn up in the Adirondacks to screw up the records. Every year or so an elk, two or three generations wild, is killed; but these resulted from old liberations and can't be considered pure quill native sons. Wolf and mountain lion reports still persist but nobody actually has come up with the real article in 40 years.

Following is a record of what the *Conservationist* believes were the last authenticated appearances of these animals in New York:

MOOSE. Dr. C. Hart Merriam, naturalist reporting in 1884 on the Adirondack animals, stated that the last moose taken in New York was an 800-pound female (7 feet tall at the hump) shot in 1861 near Raquette Lake.

Verplanck Colvin, State Engineer reporting to the Legislature in 1874, says ". . . in a few of the most remote portions of the wilderness (Adirondacks), we have met with indications of the moose which to some of the guides seemed unmistakable. This gigantic deer is, however, almost extinct in the Adirondacks. . . ."

Scattered records indicate at least the transient occurrence of moose in Sullivan County (Catskills) and Steuben County (Southern Tier) about 1780.

PUMA (panther, cougar, mountain lion). The N. Y. S. Annual Report of the Forest, Fish and Game Commission for 1902-03 recorded that from 1871 to 1894 the State paid a $20 bounty on a total of 99 pumas. Only one was authenticated for bounty in 1894. There are no authentic records after that so that the 1894 animal may well have been the last one ever taken in New York. Dr. Merriam in 1886 wrote that about 100 pumas had been killed in the Adirondacks after 1860. H. Pell Jones, who ran a hunters' hotel, told the late John B. Burnham that one was killed near Elk Lake in 1908 and that "there previously had been no sign for 15 to 20 years." No other record of the animal reportedly taken in 1908 appears to exist. Pierce in 1823 mentioned the presence of panthers in the Catskills.

LYNX. Because the lynx is so often confused with the bobcoat, even by experienced trappers, it is almost as difficult to separate genuine from bogus records as it is to separate wolves from dogs or even coyotes.

In 1907 two lynx were killed in a barnyard at Willseyville, Tioga County, just south of Ithaca. One of these is mounted and in Dr. Hamilton's collection at Cornell. Charles Livingston Bull, noted animal illustrator and qualified to judge, told Walter Schoonmaker, assistant N. Y. State Zoologist, that in a cage at Athol, Warren County, he saw a lynx which was reported to him as having been caught in 1930 near Elizabethtown, Essex County. Despite the absence of actual records, it is possible that lynx still prowl the Adirondacks.

ELK. The wapiti or American elk once was probably far more abundant in New York's Southern Tier region and in Pennsylvania than in the Catskills and the Adirondacks, where moose apparently was the major big game species. At least, Captain Eli Parker, a full-blooded Seneca Indian and a captain in the United States Army who died about 1900, said that he remembered old men of his tribe in Western New York telling of annual elk hunts in Pennsylvania and moose hunts in the Adirondacks.

A large bull elk was killed in Bolivar, Allegany County, in 1844. Major W. Austin Wadsworth owned several antlers of elk killed in the Genesee Valley between 1840 and 1843.

WOLF. New York State paid bounties on six wolves during each of the years 1895, 1896 and 1897, mainly from St. Lawrence and Franklin counties. In St. Lawrence County a single specimen (said to be a wolf) was offered for payment in 1899. It might well have been the real McCoy (and the last N. Y. State record) since such wolf-like dogs as the German shepherd ("police" dog) apparently were virtually unknown in New York at that time. Dr. W. J. Hamilton, Jr., of Cornell, one of the world's leading mammalogists, asserts that no authentic record of New York wolves exists for the present century.

In 1663 it was agreed in Jaimaca, Long Island, that "whosoever kills any wolf, the head being shown to the Town or nailed on a tree, shall have 7 bushels of Indian Corn." (Benj. Thompson's History of L. I.) The business of nailing up wolf heads for evidence reached a peak in 1665 when the Town of Flatlands (L. I.) gave the value of an "Indian coat" (as did the Town of Gravesend) to anybody who killed a wolf and brought the head to a constable, provided the head was nailed over the constable's door "there to remain". Hmmm.

Frank Forester (Henry W. Herbert) wrote of the destruction of one of the last wolf packs in Orange County during the winter of 1832 (Warwick Woodlands–1851).

WOLVERENE. Records are very scanty concerning this largest eastern member of the weasel family which somewhat resembles a small bear. Apparently in New York, as elsewhere, it was never abundant. Last authentic record appears to be that noted by Dr. Merriam who wrote that one was killed on the Raquette River in 1884.

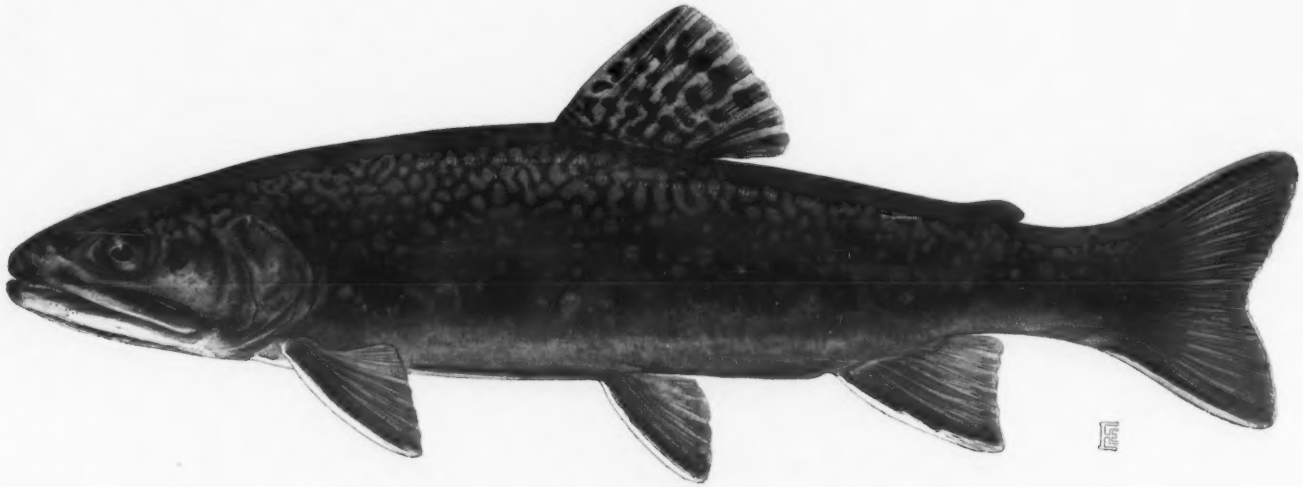
BISON (buffalo). Grant (1902) states that bison once were found in New York as far east as Syracuse and may have reached the southeastern Adirondacks in 1700. In 1911, Jacob Quiggle told Henry W. Shoemaker, Pennsylvania historian, that his grandfather, Philip Quiggle, a buffalo hunter who settled in Clinton County, Pennsylvania, in 1773, said that part of the herd summered on the northern limits of its range near the present city of Buffalo. From there he said they migrated south into Pennsylvania each winter. The last Pennsylvania herd was destroyed, according to Shoemaker, on December 31, 1799, and the last general migration from New York was ended prior to 1778. Col. John Kelly is said to have killed the last Pennsylvania buffalo on Jan. 19, 1801, near Lewisburg. The New York bison must certainly have been extinct before that.

—CLAYT SEAGEARS

The *Inside* on the *Outdoors*

by Clayt Seagears

MISSING NEW YORKERS
The following are believed to be the records for the last known authenticated occurrence in New York of native wild:
MOOSE ~ 1861 · Raquette Lake (Adirondacks). This was an 800 lb. cow killed in Aug.
PUMA (panther) - top below - 1894 - killed and presented for bounty in Herkimer County. A 1903 record may be authentic.
WOLF (timber wolf, gray wolf) - 1899 - St. Law. County. Positive identification lacking. A pair is shown below.
WOLVERENE ~ 1884 · Raquette River ~ ~ (Merriam). Shown at lower left.
LYNX ~ 1907 · pair killed near Ithaca (now in collection Cornell Univ) - left at top below. In 1930 Charles Livingston Bull (noted wildlife artist) identified a captive animal taken that year near Elizabethtown, Essex County, as a lynx. [BISON & ELK NOT SHOWN]



BROOK TROUT

Salvelinus fontinalis

Breeding colors from male 8 inches long